

June, 1933

SOAP

with which is included an

Insecticide & Disinfectant Section

Published by MACNAIR-DORLAND COMPANY, INC., 136 Liberty Street, New York

MOSKENE-

FOR SOAPS

A definite, true tonquin musk note that is STABLE TO LIGHT...will not lose color or effectiveness

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TENACIOUS . . . more so than other artificial musks

PLEASANTER . . . In odor, Moskene can be classified between Musk Ketone and Musk Ambrette. It has a more pronounced odor of ambrette seed . . . a most desirable factor.

\$4.35 a pound in 25-pound lots.

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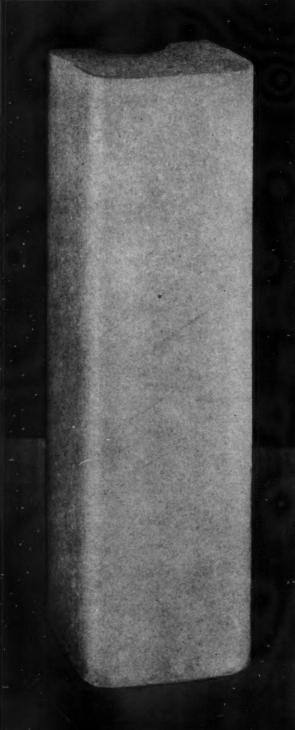
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RELY on This Deodorant Bloc . . .



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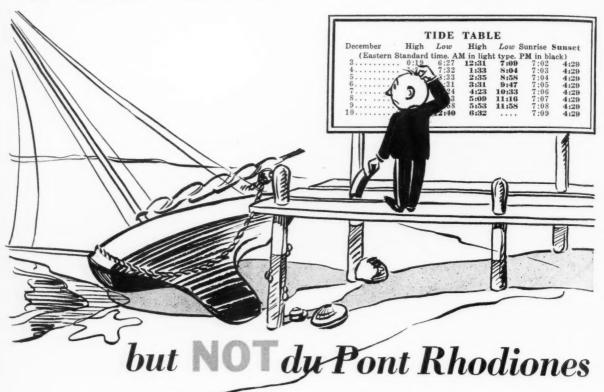
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facturer a sure laboratory control of his perfume formulae, Rhodione A. B. is especially recommended for soaps.

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Fine Chemicals Division, Wilmington, Del. Gentlemen. PLEASE SEND ME SAMPLES of your.

_____I want to test them for myself. It is understood this does not

obligate me in any way.

Name

Address ______State _____

SOAP

Volume IX Number 6

June, 1933

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IRA P. MACNAIR Editor

DR. FOSTER D. SNELL Consulting Technical Editor

GRANT A. DORLAND Business Manager

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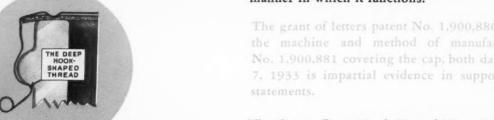
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The Crown Deep Hook Shaped Thread Cap is the

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solutions. A stable emulsion.

A liquid rubless floor wax that dries to a lustrous durable film.

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A high grade concentrated coconut oil potash soap. Used extensively for making perfumed liquid soaps and shampoos.

NOPCO quality products are always uniform and of unvarying high standards. This means complete satisfaction to ultimate consumer. Write for complete information regarding our products in which you are interested.

NATIONAL OIL PRODUCTS COMPANY

Boston

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HARRISON, N. J.

Hamburg, Germany San Francisco

June, 1933

Say you saw it in SOAP!

7

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If your present sales and profits are entirely satisfactory to you, then this offer may not be of interest.

On the other hand, if you can stand more business NOW, here is a suggestion that actually works and has proven itself again and again.

Just add a few suitable long profit products to your line that you can sell to your present customers without going to the bother and expense of investing in machinery, stocks of raw materials, labels, etc.

We will take care of all that for you,—and supply you with high grade finished products at prices so low that it would scarcely pay you to make them up yourself.

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• BY the right and might of Style and Color contrasts—your PACKAGE moves to the front!... to be seen and bought! First to compare! First to declare product VALUE! Let's put our best foot forward! Yours—the commodity... Ours—the ideal PACKAGE to sell it.

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WITH CAPTIVE MOLDED CAP

AN ASSET TO THE PRODUCT INSIDE

HERMETICALLY SEALED TUBES—To insure perfect condition of the packaged contents, no matter what their nature, the Anchor Turret Tube has a completely sealed end. There is no open aperture—but a thin spot at the side of the top that may be easily punctured. You are assured that your product has not evaporated, leaked or dried out when it reaches the consumer. Good will, consumer satisfaction and your own reputation are protected.

PERMANENTLY ATTACHED CAPS—A special construction of the top of the tube securely locks the molded caps in place, yet allows them to rotate freely. Since caps are permanently fastened to the tubes it is unnecessary to inspect them for tightness, to replace those that may have jarred loose, or to retighten them

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An inspection of the Anchor Turret Tube is necessary to appreciate its advantages. Write for samples and further information.

CUTAWAY VIEW OF TOP OF TUBE AND CAP CONSTRUCTION

Note in the above illustration the generous sized aperture in the cap from which the contents are ejected. This view shows the cap in an open position, lined up with the aperture.

Just below this aperture you can plainly see the projecting shoulder or ledge that bulges outward. This projection extends around the entire circumference of the top of the tube and is formed in it by a separate manufacturing operation after the cap is in place. It securely locks the cap on the tube, yet allows it to rotate freely.

Note also the lug (directly above the arrow) which prevents the turning of the cap beyond a specified point, thus providing the automatic stop that contributes so much to the unusual and welcome convenience of the Anchor Turret Tube,

A TURN AND IT'S OPEN...

*

A TURN AND IT'S CLOSED

ANCHOR CAP & CLOSURE CORPORATION
Long Island City, N.Y. * Toronto, Canada
Branches In All Principal Cities



THE DAY OF THE Drab is Gone,,,,

THE DAY OF Color IS HERE >>>>>

Bottled Products

Cheed Color too!





GIVE the buying public what it wants. That, after all, is the secret of increasing sales for any product. And manufacturers in many lines, from cameras to lamps, from furniture to typewriters, have found that what the public wants, what increases their sales, is dressing up their products with COLOR.

But how can you give your product a more colorful, a more modern, a more attractive appearance? That's easy. Put it in a bottle or jar of Maryland Blue. The brilliant blue catches the customer's eye. Suggests the quality of the product within. Makes the product easily identified. Serves as a reminder to buy.

It will cost you nothing to see how much better your product will look dressed up in Maryland Blue. Let us send you samples. Maryland Blue Bottles are made in a wide variety of stock shapes and sizes, as well as in special designs for many famous products.

In requesting samples, tell us the nature of your product and the sizes in which it is packed. Or, better still, send us samples of your present containers.

MARYLAND GLASS CORP.

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Maryland Green Tint and Flint Bottles are of the same high quality as Maryland Blue



MARYLAND Blue BOTTLES



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for Soap Pertume

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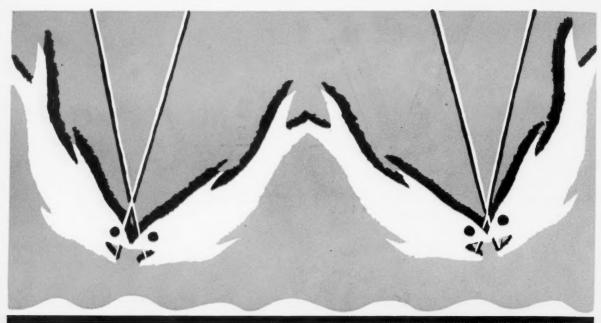
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Niagara

UNADULTERATED PARADICHLOROBENZENE

PARA

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NIAGARA ALKALI COMPANY

9 East 41st Street

New York, N. Y.

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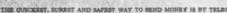


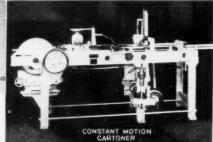
R A JONES & CO INC=CINCINNATI OHIO=

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Seventeen Years Satisfaction





Since 1916 we have furnished Lever Brothers Company 94 cartoners and soap presses for their factories in America and in twelve foreign countries; machines which have revolutionized the pressing and packaging of Sunlight and Lifebuoy Soap and many other world-famous Lever Brothers products.

Earlier models gave their owners satisfaction, but the Constant Motion Cartoner, introduced four years ago, set a new standard of efficiency in its field by doubling production and vastly improving the quality of packaging. It is this type, now in Lever Brothers plant in Hammond, Indiana, which is specified in the above order for Port Sunlight.

Standardization enables us to guarantee prompt shipment and that cartoners with hastily-designed, unproven mechanical principles will not be supplied.

THE CONSTANT MOTION CARTONER

will give you the best possible packaging and reduce its cost to an "irreducible minimum." Let us tell you more about it.

COMPANY.

The Standardized Constant Motion Cartoner packages bottles, jars, tins, collapsible tubes and many other articles. It feeds, folds, and inserts direction sheets and corrugated board liners with the loads

SOAP

Volume Nine

Number Six

On the Rise?

FROM out of the mass of ballyhoo surrounding the current improvement in general business, we have looked for signs of more substantial indications that things are really better. In fact, for three years, we have been diligently searching for some tangible sign of improvement. Up until the past month or two, we must admit that our search has been fruitless. In every case, the wish seemed to be father to the thought. Mere statements that we had "turned the corner" were inevitably refuted by the facts. We remained in the doldrums and continued to slide further into the apparently bottomless pit.

Exactly how and when business changed its course is still a trifle hazy. It was probably just about the time when the country went off the gold basis in international trade. At any rate, the long awaited tangible signs of improvement began to make their appearance. Commodity prices staged a more or less spectacular and sustained rise. The same thing happened in the security markets. Carloading figures and power production mounted steadily and for the first time in several years, topped the corresponding period for the previous year.

As for the soap industry, we have received numerous encouraging reports from various parts of the country, chief among which have been increased tonnage shipped and widespread advances in prices. In the case of two large plants, we heard that the cars of soap shipped in May were practically double the figures for March. In the purchase of raw

materals, we hear of increased movement of oils and fats to soapers, and of larger shipments on chemical contracts. Without a doubt, the generally higher level of prices all around has furnished the chief stimulus to business generally.

As to the future,—who knows? Every sign of good sense and logic points to a continuation of improvement. But, when all is said and done, common sense and logic have been conspicuous by their absence for many a moon in the world of business. Industry and business are still somewhat skittish and ready to bolt for the tall timber again upon slight provocation. However, a better feeling all around is the strongest factor in quieting shaky nerves. Unless there should be any untoward happenings, it is our guess that present gains will be held and further improvement made.

The Rush to Market

WITH a decline in gross sales, manufacturers have been ever willing to grasp at every straw to hold up their volume. The frenzied search for new things to take the place of lost business on old products has been widespread over the past two years. As a consequence of the rush into new items, a veritable flood of additional products has come upon the market. A sad feature of the whole business is that a goodly percentage of these new goods bears mute witness to the manner in which they were conceived, manufactured and thrust upon the dealer, already harried by too great a diversification of brands.

There is probably not an item of any worth or reputation which has not been widely imitated. Success has attracted of late the inevitable imitations in greater volume than ever before. Apparently, many manufacturers have not stopped to reason, but have rushed their imitations to market blindly, invariably at lower prices. The result has been achieved in numerous cases at the expense of quality.

The number of nationally-known names associated with this marketing scramble has been really appalling. Brand names of highest repute have been permitted to be hooked on to new products of very dubious quality. Evidently, these represented desperate attempts to bolster declining sales volume. Quite obviously, time is going to prove that the end does not justify the means in these cases. It is far easier to break down a good reputation than to build one up.

Credit and Caution

HANGES in the credit standing of busi-C ness houses have been taking place so rapidly during the past year or so that they have taxed the ability of the recognized credit agencies to keep pace. It has been no uncommon occurrence for the published ratings of even large concerns to misrepresent grossly their financial positions at any given time. This has in no sense been a deliberate misrepresentation by the publishers of credit guide books, but has been due chiefly to the unusually rapid march of events. As the trend was almost wholly toward reduced financial responsibility, there is no wonder that a "safe" credit rating today might have become a hazardous risk tomorrow.

Cases have been pointed out to us of credit extended to companies right up to the very day of receivership or assumption of control by creditors' committees. The defense of the credit man invariably has been that the ratings of the firms in the standard published guides were altogether satisfactory and gave no hint of impending trouble. Of course, it is ridiculous to expect that any firm will broadcast the news to suppliers that its financial position has been weakened and that its published rating does not represent the true state of its business at the moment it is con-

templating a purchase. Naturally, the information must be checked up elsewhere. Current data should be made the basis for the extension of credit. This goes without saying for new accounts. For old accounts, a more frequent check-up and less reliance on published ratings is just good business caution today.

Our Own Faults,—And Others

THE American Medical Association has unleashed a few of its big guns against untrue and misleading food stuffs and cosmetic advertising. Not the slightest doubt exists in our mind but that the A. M. A. is absolutely correct in its contentions. However, it strikes us that the Association goes somewhat afield for new stinkholes to clean. We feel that the U. S. Department of Agriculture has taken this matter in hand and that before long we will see new and tangible legislative evidence of it. We might suggest that if the medical association could shake off its holier-than-thou attitude long enough to delve well into the more modern aspects of medical quackery, perhaps it might be doing a greater service to the health and well-being of the nation. We refer not to the age-old advertising quack, but to the newer, more subtle quackery of the "ethical" practitioner, engendered perhaps by hard times and a falling off in "business". How much easier it is for all of us to see the mote in the other fellow's eve!

The statement that the American soap industry is throwing away forty million dollars per year in profits which it should receive, was made recently by a man who for many years has sold important raw materials to the industry and who has a rather close knowledge of its problems. He points out that a lack of cooperation in both manufacturing and marketing among the leading soapers has engendered one of the most costly competitive situations in modern industry. Extreme secretiveness in research results and manufacturing technology, he believes, borders on the ludicrous. At any rate, the additional forty million is there if the industry would reach out and take it.



Modern transportation on the Sumatra plantations. Bringing in palm nut clusters to the factory on Poeloe Radia Estate, Sumatra East Coast

PALM OIL

By E. L. THOMAS

HE oil palm (eloeis guineensis) supplying the palm oil of commerce comprises many varieties. Scientists believe, however, that there is but one species which had its origin in the tropical regions of Africa. Today, the African habitat of the oil palm may be described as a belt extending from 20 degrees north to 10 degrees south of the equator and embracing within its bounds Liberia and West African colonial possessions of France, Portugal, Great Britain and Belgium.

The heaviest stands of oil palms are found in Nigeria and those areas contiguous to the Congo River in Belgian Congo where plantations of cultivated trees have been created out of the virgin jungle from concessions granted important British interests. The original grant (1911) was 1,875,000 acres, the development of which was so far advanced in 1927 that the production that year equalled the oil returns anticipated for 1937.

Aside from the plantations described and others owned by the same interests in Nigeria, the West African palm oil industry is entirely in the hands of the native population which gathers the fruit from wild trees growing in proximity to their places of abode. The process of removing the oil which is distinctly a family industry is accomplished by crude, primitive methods wasteful of labor and resulting in a product of variable quality. However, habits of centuries are not readily revamped and, therefore, despite earnest and persistent efforts on

the part of the Nigerian government to establish small mill units in localities throughout the country with clearly delineated boundary lines for local areas of fruit gathering, the natives have resisted these innovations and clung to their century-old practices. The Gold Coast government has offered a scale of subsidies to mill operators to attract capital and at the same time through application of modern technique to improve the quality of its palm oil. This program was inaugurated too recently to determine the measure of success and popularity it will attain.

The first plantations on the island of Sumatra were set out in 1911 with seedlings brought from West Africa. The total acreage under cultivation to oil palm trees in 1930 was approximately 150,000 acres. The first crop of fruit was harvested in 1919 (trees come into bearing five to six years after planting as seedlings). The development of palm tree cultivation in Sumatra has been fairly rapid since its inception. Sumatran plantations are located within a narrowly circumscribed territory in North Sumatra along the coast and penetrating inland but a short distance. The Sumatran industry promises steady expansion in the future, aided by the abandonment by the British government of the rubber restriction act and the realization that under normal conditions, there will be a ready market for the island's contribution to the world's production of palm oil and kernels.



Cutting away the lower branches and leaves of young oil palm trees to permit easier harvesting of the fruit. The oil palms under cultivation in all parts of the world which go to make up the modern plantations originated from African seed or seedlings. West Africa is still far and away the greatest producer and shipper of palm oil, although the rise of the Dutch East Indies plantation production has been rapid over the past five years

THE development of palm oil production, consumption, transportation, and present aspects of the industry. Based on information supplied by the Foreign Service of the Bureau of Foreign and Domestic Commerce and on statistical reports on file. Prepared while the author was a specialist in oils and fats of the Foodstuffs Division of the Department of Commerce. Photos by Asst. Trade Commissioner Carl Boehringer at Batavia.



Cooperage costs for palm oil shipment have always been a heavy expense on producers and account for the growing popularity of bulk shipment in tank steamers



Palm oil is shipped from the interior down the rivers on native-built barges to the shipping ports where it is transferred to storage tanks, or transshipped via steamer in the original barrels

British Malaya is the seat of a flourishing though small plantation cultivation of the oil palm with a total of 56,960 acres in five states planted at the end of 1931 of which 19,475 acres (in 1930) carried mature trees. Approximately 20 per cent of this acreage was planted during 1931.

A CTUAL production of palm oil is not known, except in the case of the Belgian Congo Sumatra and British Malaya, for the reason that difficulties of communication with isolated sections of the producing area in West Africa render effective control impossible. The volume of export movements is considered to be the world's commercial production of oil and kernels although it is known that the native population which produced palm oil originally for their own culinary purposes and as an illuminant, continues still to supply its own needs in addition to the oil and kernels which are exchanged with traders for foreign merchandise. In the Belgian Congo, Sumatra and British Malaya plantation management makes it easy to determine production but since virtually the entire volume of such production is exported, official export data have been employed throughout in the preparation of the following tabulations:

		TABLE	I				
		Exports of Pa	alm Oil				
		(Short to	ns)				
	1926	1927	1928	1929	1930	1931	1932
French West Africa-							
Nigeria ²	126,859	126,829	142,364	147,666	152,096	132,360	129,987
Gold Coast ³	1.962	1.221	562	668	548	357	758
Sierra Leone	3,208	4,042	2,828	3,186	4,090	1,522	1
French West Africa-							
Ivory Coast	7,456	7.407	7,469	7,809	7.098	1	1
Dahomey	19,739	20.573	10,757	16.887	23,795	1	1
Cameroons	6,405	4.978	5.972	9,216	7,569	1	1
Togoland	2.934	2,292	1,465	1,753	2,473	1,628	1
Fr. Equit. Africa	799	742	951	1,306	1.071	1	1
Fr. Guinea	839	876	991	552	502	1	1
Belgian Congo	20,301	20,253	29,218	33,396	40,773	40.317	1
Netherlands India	14.637	23.822	31,790	39,536	54,378	67,667	93,665
British Malaya	812	956	1.639	2,116	3,531	5,222	1
Liberia	2,746	2.696	2.028	2,723	2,370	1	
Portuguese West Africa ⁴	4,657	4,413	4,655	4,483	4,969	1	
	213,354	221.100	242,689	271.297	305,263	-	

SOURCES: Official Statistics of Various Governments Concerned.

The United States is the leader among the nations of the world in the consumption of palm oil. Until recently, we derived our supplies of palm kernel oil from second-hand sources, primarily the Netherlands, Germany and England wherein much of the activity of palm kernel crushing has centered. In the past few years we have become more interested from a commercial point of view in this branch of the vegetable oil industry. As a consequence we are now direct importers of the kernels from areas of production although we still continue to purchase abroad a substantial proportion of our requirements of palm kernel oil, perhaps because lower European costs of manufacture make possible prices more attractive to American consumers.

Following next after the United States in respect to palm oil consumption is the United Kingdom, then several Continental European countries with Germany, France and Netherlands in the van. Germany is way ahead of every other nation as an importer of palm nut kernels. In fact, over the past four or five years, German crushers have taken annually on the average twice as large a tonnage of these kernels as their nearest rivals in Great Britain. Although Belgium places third among the importing countries, it should be explained that a goodly share of the kernels consigned to Antwerp are destined to Dutch and German buyers.

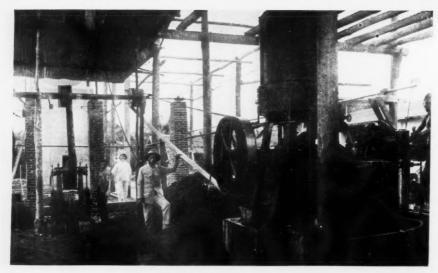
The following tables have been devised to present visually the trade of the more important exporting and importing countries of the world with reference to palm oil. (See Table II.)

As a matter of record it should be stated that direct shipments of palm kernels to the United States from British West Africa (Nigeria, Sierra Leone, Gold Cost, British Camerons and British Togoland) expanded from a volume of 480 short tons in 1924 to 4,424 short tons in 1930. There were no direct movements prior to 1924, or, if so, they were too small to merit consideration.

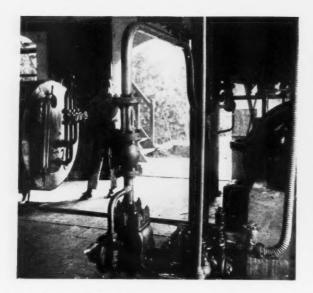
To portray more definitely the comparative consumption of palm oil and palm kernels by the various countries, the following figures are presented: (See Table III.)

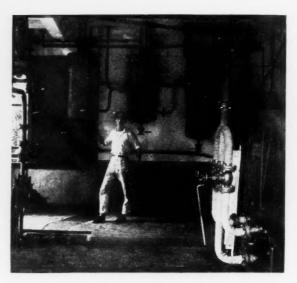
ilt

Figures not available.
Includes exports from Mandated Territory of the Cameroons.
Includes exports from Mandated Territory of Togoland from 1924, 1930. Excludes such exports for 1931.
Includes of Angola, Portuguese Guinea, St. Thomas and Principe. Angola supplies between 80 and 90 per cent of the exports.
Partly estimated.

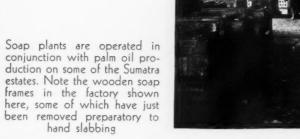


Hydraulic pressing and pumping equipment on the Tanah Itam Oeloe Estate in the Netherlands Indies. The "factory" consists merely of a corrugated iron roof over the equipment





In addition to hydraulic presses, modern solvent extraction equipment is used for palm oil production. Two views of the oil extraction plant on a Sumatra East Coast estate





20

TABLE II

Palm Oil Exports by Leading Exporting Countries to Principal Importing Countries

			,000 Pounds)	ncipai importii			
Exporting Country-	1926	1927	1928	1929	1930	1931	1932
Nigeria-							
To United Kingdom	72,673	53,203	51,998	45,583	41,822	33,860	51,929
United States	31,118	45,681	48,878	66,876	68,787	49,165	28,065
Germany	9,250	11,252	14,442	11,107	13,933	15,763	9,43
Italy	13,907	11,582	19,520	15,345	19,796	23,218	27,86
Total all exports	132,033*	126,829	142,364	147,666	156,735*	132,359	129,987
Dutch East Indies-							
To Netherlands	4,319	8,854	7,178	4,216	7,226	7,501	14,766
United Kingdom	2,309	3,993	5,354	6.766	3,898	11,839	8.190
Germany	1.102	146	1,669	587	309	3,826	5,105
United States	6,044	10,044	11,553	24,782	40,478	42,076	59,340
Total all exports	14,047	23,827	31.218	37,409	52,426	67,666	93,665
Belgian Congo—							***
To Angola	605	452	627	714	1.017		
Belgium	6,822	5,859	8,002		1,017	F (00	*****
United States	12,797			10,025	10,010	5,693	*****
		13,559	19,432	20,504	24,831	24,913	
United Kingdom				2,131	3,822	618	
Total all exports	20,301	20,253	29,218	33,396	40,773	40,317	
Dahomey—							***
To France	10,392	7,649	5,905	9.069	4,938		
United States	3,309	4,787	2,677	4.186	2,857		
United Kingdom	2,444	2,703	633	2,373	5,148		
Germany	1.695	2,853	1,222	3,783	7,889		
Netherlands	1,074	2,213	176	2,107	1,660		
Total all exports	19,739	20,573	10,757	25,255**	23,795		
Ivory Coast—							***
To France	6,407	3,458	7,044		5,159		
United Kingdom	694	2,467	136		610		
Italy	116	338	162		1.101	*****	*****
ALUAY			102		1,101		
Total all exports	7,456	7,407	7,469	***	7,098		

* Inclusive of minor exports from Gold Coast and Sierra Leone.
** Inclusive of exports from Ivory Coast and minor exports from French Equatorial Africa and French Guinea.
*** Not available.

SOURCE: Statistics of Various Countries Concerned.

TABLE III

Imports of Leading Consumer Countries (In Thousands of Pounds)

		/*	ii a modounds	or a ounds)						
	19	928	1	929	1	930	1931			
	Palm Oil	Palm Kernels	Palm Oil	Palm Kernels	Palm Oil	Palm Kernels	Palm Oil	Palm Kernels		
United States	169,228	53,812*	261,816	69,909*	287,492	39,682*	258,156	41,537*		
United Kingdom	116,370	367,908	133,896	340,506	112,246	282,172	109,179	282,268**		
Germany	44,682	655,576	44,242	671,246	65,124	676,272	81,113	589,557		
France	35,148	28,560	18,942	24,718	25,430	27,274	20,261	23,928		
Netherlands ###	19,672	15,427	20,262	16,716	21,666	64,664	18,751	57,165		
Belgium ###	7,909#	156,148†	7,880#	161,280†	##	102,480†	##	78,837†		

*Annual imports of palm kernel oil, including domestic production for 1930 of 711,529 pounds and for 1931 of 18,542,477 pounds (Bureau of the Census).

**Liverpool United General Produce Association.
†Annual arrivals at Antwerp.

**Not available.

*Includes imports from Belgian Congo: 11,296,000 pounds in 1928 and 9,495,000 pounds in 1929.

**SolfRCE: Statistics of Various Countries Names.

SOURCE: Statistics of Various Countries Named. Note.-Imports of palm oil into the United States States in 1932 fell to 217,167,000 pounds.

PALM oil is, of course, widely used as a soap fat. tries, the first statement of "Factory Consumption of

While consumption data are lacking for other coun-Animal and Vegetable Fats and Oils" according to industries for 1929 published by the United States Bureau of the Census disclosed that 90 per cent of the consumption of palm oil in this country was reported by the soap industry. The percentage including foots fell to 78 per cent of the total reported consumption in 1931. (Turn to Page 47)

A forkful of food

A forkful of food seems far removed from *industrial* activities and from American Cyanamid products; and yet it really is not. For when you eat, industries (among them your own!) are represented in the food itself and in all the accessory products... china, glass, silver, linen, cooking utensils, and so on. The many "fields" which are affected by daily human living are served by the many products of American Cyanamid & Chemical Corporation.

Alkalis
Carbonate of Potash
Caustic Potash
Cresylic Acid
Sodium Silicate
Tri Sodium Phosphate
Zinc Oxide



AMERICAN CYANAMID & CHEMICAL CORPORATION

535 FIFTH AVENUE - NEW YORK

The Outlook in Raw Materials

the one important question which is engaging the attention of every soap maker today. A few weeks ago, on the first wave of inflation sentiment, a scramble to secure stocks and safeguard future costs sent buyers on the run to supply houses in something akin to a mild panic. Salesmen who up until a few weeks ago were haunting purchasing agents' offices in a fruitless attempt to ferret out orders suddenly found themselves much in demand for contracts. Soap makers, and most manufacturers in other fields as well, were anxious to get their names on contracts, not with a view to increasing orders today, perhaps, but chiefly to get the benefit of current low prices on future requirements.

ly

The natural result of this sudden shift of sentiment, coming to sellers as an acute shock after such a long period of declining prices and backward hand-to-mouth buying, was, of course, to make sellers extremely wary about extending future commitments. Although willing and able so supply sufficient stocks to meet immediate needs at the current market, they refused to gamble on the future course of prices by betting against the popular assurance of a coming price advance. In the essential oil market, particularly, many of the more conservative houses refused to make any extended commitments at any figure. Old customers were taken care of, but any suspicion of speculative buying or any inquiries from new consuming sources were greeted with a decided lack of interest.

A number of soap manufacturers, particularly in the group of smaller producers, awoke with a start to find that they had already missed their market. Buying on a week-to-week basis through the period of falling prices, carrying no more of a supply of raw material than absolutely necessary, they found that prices had shot up twenty to thirty per cent before they even had the option of covering. Waiting for the reaction before buying, they saw the market get further out of hand, and a number are now reported sadly contemplating the lost opportunity to acquire stocks of two cent tallow.

A^T the moment, the industry is still as much confused as ever as to the future course of raw material prices. Some have built up more substantial stocks, but the majority are still trying to get up to date in the fast-moving train of economic events, and are looking vainly for a guide to future prospects. Experienced

traders seem just as uncertain, there being no agreement as to the future course, and it being the general opinion that one man's guess is as good as another's. For the time being, the oil and fat market has quieted down somewhat, and buyers are now reported to be backward about placing futures at moderate advances from the current level. They realize that they have missed the bottom prices, but seem to feel that they will be able to do a little better than the present market in the reaction which some buyers expect after what they term too sharp an advance.

In this direction it is well to note that there is still much bearish sentiment, particularly among professional traders, who are always suspicious of advances brought on by sudden shifts in sentiment. One trader, who stubbornly described himself as still very bullish, defended his opinion by pointing to the supply and demand situation. There has been no real change in the supply-demand situation in the soap industry, he said, surplus stocks of oils and fats still being tremendous, although not in users' hands. He pointed out there is not liable to be any sharp expansion in outlets for these surpluses through the soap industry, as the industry is already operating at a point comparatively close to capacity. The index of employment in the American soap industry stood at 93.7 in March, 1933, as compared with 96.8 in March, 1932, and 100 as the average for the twelve months of 1926. With present activity in the industry so close to its best levels, there is little opportunity for wiping out the excess stocks merely by a return to a previous level of activity.

In this connection, however, one must note that supply and demand are not always immediate or precisely accurate price barometers. In many situations, the psychological element is a more potent factor than the immediate supply and demand situation. Just as quotations went too low on the downgrade, principally for psychological reasons, so may they be expected to rise back nearer to normal without any compensating change in the supply and demand situation. In other words, while actual conditions may have justified four cent tallow, the psychological effect of a declining market may have sent the price to two cents. Following this course of reasoning, an advance to four would be in order merely on the basis of a reversal of the buyer's psychology, without any change in the underlying market situation being necessary to support the advance.

BULLISH opinion finds much in the present general business situation from which to gain support. To refer to a few of the more important business indices, steel production is back to 35% of capacity, after having hit a low point of 11 or 12%. Current car loadings are for the first time in several years above the corresponding total for the previous year. The index of electrical power output shows the same picture. In talking with business men in a dozen different lines, reports of increased orders and greater activity are practically unanimous. In following the course of deflations such as we have been through, economists look for two important points,-the interruption of the downward trend, which is supposed to mark the end-point of deflations, and the point where important indices begin to reflect a healthier position than the figures for the previous year, which is usually taken as a sign of the emergence of the upward trend. If the recent depression follows the general pattern of previous ones, bullish opinion holds that we then must already be started on the slow upward swing. There may be individual peaks which will need leveling out, but the general trend must be upward.

Among the factors strengthening the bullish sentiment is the insistence in some quarters that inflation is inevitable. The opinion exists that the more radical inflationists were silenced a few weeks ago with a definite presidential commitment to raise prices, and that by one means or another, this promise must be made good. If it cannot be done by ordinary operation of the banking system in loosening frozen buying power and expanding bank credit through open market purchase of government bonds, the other means to the same end are always available,-greenbacks, silver and a lighter gold dollar. This general expectation of inflation, a be lief held both in this country and abroad, cannot be denied, and is in itself one of the important psychological influences which will bring higher prices without resort to the more drastic means of obtaining

THAT bullish sentiment is stronger than bearish sentiment in the soap industry is indicated by the course of soap prices over the past few weeks. A number of advances have been made by the larger producers, who are believed to welcome higher raw material prices as an excuse for abandoning the severe price war which has been the principal concern of soap sales managers over the past two years. In the soap market, it is no longer a question of checking up on competition to be in position to cut fractionally under the competitive price. Instead the inquiries are designed to check up on how much competitors have advanced prices, so that no week-old prices, giving the buyers too good a deal, will be offered.

This upward movement of soap prices will of course find difficulty in keeping up with the advance in raw materials, if the latter continues. Tallow prices have already advanced fifty to sixty per cent from the low point, while soap prices have been raised barely fifteen



Until midsummer of 1932 the trend of tallow prices over the past eight years has been steadily downward. Note the recovery, reaction and subsequent emergence of the upward trend.

per cent. There is bound to be a lag in the adjustment of prices of finished goods to raw material prices in any general advance, as, due to the competitive situation, prices to the consumer cannot be advanced successfully at a moment's notice. Thus in the near future we are apt to see a reversal of the situation which has been bothering the large soapmakers so much over the past few years. Smaller producers, lacking the resources or foresight to stock up substantially on raw materials, are apt to find direct costs rising at a pace which selling prices cannot follow, while their more fortunate competitors still continue to draw on their extensive stocks of low cost raw materials.

In the opinion of one follower of the oil and fat market, the present situation is what the more strongly entrenched soap makers have been aiming at for the last few years. According to this opinion, they have held their purchases at a minimum in recent months, while holding substantial stocks from previous purchases, so that at a critical point in the market situation this buying power could be exerted to keep oil and fat prices on the up-grade once they started to advance. Substantial buying power, held in reserve, can have a decidedly strengthening effect on any market. It remains to be seen whether such tactics will be employed, or will even need to be employed in sustaining what is already a substantial advance in the oil and fat markets.

Discounting undue optimism and reactionary pessimism, taking into account factors such as the present exchange situation, the possibility of startling developments at the world economic conference, it seems in viewing the situation as a part of one great connected movement that the prevailing trend for the next few years should be upward. True, fats and oils have risen sharply in value over the past few months, when compared to their lows; but they are still a long way from levels which were considered as normal through the twenties.

The safe course at this time would seem to be to go into the apparent upward price movement with larger (Continued on Page 45)

Mechanics' Hand Soaps

New Proposed U. S. Specification Issued Covering Hand Paste and Powdered Hand Detergent

NEW proposed specification covering materials, character, packing, and testing of mechanics' hand paste and powdered hand detergent, has been issued by the Technical Committee on Soaps and Soap Products of the U. S. Federal Specifications Board. The tentative draft of the new proposed specification has been issued for submission to manufacturers and others for suggestions and criticism before adoption by the Board as an official specification. Comments from manufacturers on the specification requirements as published herewith should be directed to F. W. Smither, chairman of the committee, at the Bureau of Standards, Washington, D. C.

A. APPLICABLE FEDERAL SPECIFICATIONS

A-1. The following Federal specifications in effect on date of invitation for bids shall, insofar as applicable, form a part of this specification: RR-S-366—Sieves; Standard, Testing.

A-2. Any special requirements of the individual departments of the Government are noted under Section H.

R Types

B-1. Detergent for mechanics' use shall be of the following types, as specified:

Type I—Hand grit paste soap.
Type II—Hand scouring powder.

C. MATERIAL

C-1. Detergent for mechanics' use shall be a uniform mixture in paste or powder form, as specified, and shall be satisfactory for removing oil, grease, paint, printing inks, and other occupational soil from the hands of automobile mechanics, garage employees, and other operatives without harmful effect on the skin (see Sections F-1c and I-5).

D. GENERAL REQUIREMENTS: See Section E.

E. DETAIL REQUIREMENTS

F.I. Type I-Hand Grit Paste Soap.

E-1-a. The material shall be a uniform paste.

E-1-b. Odor.—The odor shall not be objectionable. If desired shall conform to the odor of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an air-tight, closed container for comparison with samples from deliveries. (See Sections F-1c, I-3 and I-4.)

E.1-c. Color.—The material shall be colored or uncolored. If desired shall conform to the color of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an air-tight, opaque, closed container for comparison with samples from deliveries. (See Sections F-1c, 1-3 and I-4.)

E-1-d. Matter Volatile at 105 to 110°C.—Volatile matter shall not exceed 55 per cent. Deliveries which yield more than 55 per cent of volatile matter shall be rejected without further test.

E-1-e. Alkaline Salts.—Alkaline salts, calculated as sodium carbonate (Na₂CO₂), shall be not more than 2 per cent.

E-1-f. Free Alkali.—Free alkali, calculated as sodium hydroxide (NaOH), shall not exceed 0.02 per cent.

E-1-g. Free Acid.—Free acid, calculated as oleic acid, shall not exceed 0.2 per cent.

E-1-h. Anhydrous Soap.—Anhydrous soap, calculated as soda soap, shall be not less than 8 per cent nor more than 16 per cent.

E-l-i. Insoluble Siliceous Material.—Insoluble siliceous matter shall be not less than 25 per cent nor more than 50 per cent. E-l-j. Nature of Insoluble Siliceous Material.—The insoluble siliceous matter shall consist entirely of volcanic ash (pumicite),

or powdered pumice, or a mixture thereof and shall conform to the following fineness requirements:

No. 200 sieve 60

 Minimum Per Cent
 Maximum Per Cent

 No. 60 sieve
 10
 20

 No. 80 sieve
 30
 45

 No. 100 sieve
 35
 55

E-1-k. Rosin or Sugar.—These substances shall not be present. E-1-l. Consistency.—The material shall retain the consistency of a firm paste after keeping in a closed container for 6 hours at 30 to 32° C. (86 to 89.6° F.).

E-1-m. Keeping Qualities.—The material shall not deteriorate when kept in an air-tight container (see Section I-6).

E-1-n. Computation.—The percentage of matter volatile at 105 to 110° C. will be computed on the basis of the grit paste soap as received, but all other constituents will be calculated to the basis of material containing 50 per cent of matter volatile at 105 to 110° C.

E-2. Type II.—Hand Scouring Powder.

E-2-a. The material shall be a uniform, free-flowing powder. E-2-b. Odor.—The odor shall not be objectionable. If desired shall conform to the odor of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an air-tight, closed container for comparison with samples from deliveries. (See Sections F-1c, I-3 and I-4.)

E-2-c. Color.—The material shall be of a light gray or white color. If desired shall conform to the color of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an air-tight, opaque, closed container for comparison with samples from deliveries. (See Sections F-1-c, 1-3 and I-4.)

E-2-d. Matter Volatile at 105 to 110° C.—Volatile matter shall not exceed 5 per cent. Deliveries which yield more than 5 per cent of volatile matter shall be rejected without further test.

E-2-e. Alkaline Salts.—Alkaline salts, calculated as sodium carbonate (Na₂CO₃), shall be not more than 2 per cent. The alkaline salts shall consist of borax, sodium carbonate, or a mixture thereof.

E-2-f. Free Alkali.—Free alkali, calculated as sodium hydroxide (NaOH), shall not exceed 0.1 per cent.

E-2-g. Free Acid.—Free acid, calculated as oleic acid, shall not exceed 0.2 per cent.

E-2-h. Anhydrous Soap.—Anhydrous soap, calculated as soda soap, shall be not less than 17 per cent.

soap, snail be not less than 17 per cent. E-2-i. Insoluble Siliceous Material.—Insoluble siliceous matter shall be not less than 60 per cent nor more than 76 per cent.

E-2-j. Nature of the Insoluble Siliceous Material.—The insoluble siliceous matter shall consist entirely of ground soapstone (talc or pyrophyllite), and shall conform to the following fineness requirements:

Re	taine	ed on													-	7	_	ximum er cent
No.	60	sieve																5
No.	100	sieve																30
No.	200	sieve								_								60

E-2-k. Rosin or Sugar.—These substances shall not be present. E-2-1. Computation.—All constituents shall be reported on the basis of the sample as received.

HEPTYLLYS

is rapidly being recognized as one of the outstanding aromatic chemicals being offered to the perfume and soap manufacturers. The reasons for this recognition are that Heptyllys B has a definite, flowery note—a lasting odor—blends readily with other aromatics in compounds—has a greater odor volume than other aromatic chemicals in the same price and odor class—and will not discolor. Try the following simple compounds, costing about \$2.25 the pound, for a soap or cream odor and note particularly its lasting quality:

18 parts Heptyllys B

10 parts Phenyl Ethyl Alcohol

15 parts Benzyl Acetate

12 parts Nerollys

15 parts Geraniol Standard 10 parts Oil of Cedarwood

10 parts Viollys A.B.

6 parts Cinnamic Alcohol

4 parts Musk Xylene

Upon request we will be glad to submit samples of Heptyllys B, Viollys A.B. and Nerollys.



The Naugatuck Chemical Company

1790 BROADWAY

NEW YORK, N. Y.

F. METHODS OF SAMPLING, INSPECTION, AND TESTS.

F-1. Sampling.

F-1-a. When Packed in Cans or Cartons .- One can or carton shall be taken at random from not less than 1 per cent of the sellers' shipping containers, provided such containers contain not less than 50 pounds each. In the case of smaller containers a can or carton shall be taken at random from each lot of containers totaling not to exceed 5,000 pounds. The total sample shall in all cases consist of not less than three cans or carton taken at random from separate containers. With very large lots, where the sample drawn as above will amount to more than 20 pounds, the percentage of packages sampled shall be reduced, so that the amount drawn shall not exceed 20 pounds. Wrap the individual cans or cartons tightly in paraffined paper at once and seal by rubbing the edges with a heated iron. The inspector should accurately weigh each wrapped can or carton, record its weight and the date of weighing on the wrapper, place the wrapped cans or cartons in an air-tight container, which should be nearly filled, seal, mark, and send to the laboratory for test. Samples should be kept cool until tested. The seller shall have the option of being represented at the time of sampling and when he so requests shall be furnished with a duplicate sample.

F-1-b. When in Bulk (Type II only) .- A grab sample of not less than one-half pound shall be taken at random from not less than 1 per cent of the sellers' shipping containers, provided such containers contain not less than 100 pounds each. In case of smaller containers a grab sample of not less than one-half pound shall be taken at random from each lot of containers totaling not to exceed 10,000 pounds. The total sample shall in cases consist of not less than three grab portions taken at random from separate containers. With very large lots, where the sample drawn as above will amount to more than 20 pounds, the percentage of packages sampled shall be reduced, so that the amount drawn shall not exceed 20 pounds. The inspector should rapidly mix the sample, place in an air-tight container, which shall be filled, seal, mark, accurately weigh, record its weight and date of weighing on the package, and send to the laboratory for test. Samples should be kept cool until tested. The seller shall have the option of being represented at the time of sampling and when he so requests shall be furnished with a duplicate sample.

F·1·c. The inspector shall note whether the material (Type I or Type II) meets the specification as to color, odor, and satisfactoriness for removing oil, grease, etc. (See Sections C-1, E-1·b, E-1·c, E-2·b, E-2·c, 1·3, 1·4 and 1·5.)

F-2. Testing.

F-2-a. Preliminary Tests.—Note the color, odor, and condition of the sample. If the sample is received in original cans or cartons, note the weight of the contents of each can or carton.

F-2-b. Preparation of Sample.—Rapidly mix the sample; if desired, quarter down to about 1 pound, and weigh out all portions for analysis at once. Unused portions of the sample used for analysis shall be preserved in an air-tight container in a cool place.

F-2-c. When a determination shows non-conformity with specification, a duplicate shall be run.

F-2-d. Matter Volatile at 105° to 110° C.—Weigh 5 g of the sample in a porcelain or glass dish, about 6 to 7 cm. in diameter and 4 cm. deep, dry to constant weight in an inert atmosphere at a temperature not exceeding 105° to 110° C. Report loss in weight as matter volatile at 105° to 110° C.

F-2-e. Free Alkali or Free Acid.—Digest hot a 5 g sample with 100 ml of hot freshly boiled neutral ethyl alcohol (94 per cent or higher). Filter through a counterpoised filter paper neutral to phenolphthalein or a weighed Gooch crucible with suction into a dry weighed beaker, protecting the solution during the operation from carbon dioxide and other acid fumes. Wash the residue on the dry paper or in the crucible with hot neutral alcohol until free from soap. Titrate the filtrate, using phenolphthalein as indicator, with standard acid or alkali solution, and calculate the alkalinity to sodium hydroxide or acidity to obeic acid

F-2-f. Matter Insoluble in Water.—After filtering and thoroughly washing the residue from F-2-e, extract and wash it thoroughly with hot water. Dry the filter and residue at 105 to 110° C. for three hours, cool, and weight matter insoluble in water. The insoluble matter shall be siliceous and shall show the characteristics of the material specified for the type or types ordered

when examined under the petrographic microscope. (See Sections E-1-j and E-2-k.)

F-2-g. Alkali as Alkaline Salts. (Total Alkalinity of Matter Insoluble in Alcohol.)—Titrate the filtrate from the determination of matter insoluble in water with standard acid, using methyl orange as indicator. Calculate alkalinity to sodium carbonate (Na₂CO₂). Determine by qualitative analysis the nature of the alkaline salts.

F·2·h. Total Anhydrous Soap.—Evaporate the alcoholic solution obtained after filtering off and washing the matter insoluble in alcohol (Section F·2·e) to dryness, dry at 105 to 110° C. to constant weight. Report the result as total anhydrous soap.

F-2-i. Sieve Tests.—The sieves used in these tests shall conform to Federal Specification RR-S-366 for "Sieves; Standard, Testing." (See Section I-8.) For convenience in weighing, a 3-inch sieve is recommended.

Type I. Dry for one hour in an oven at 105 to 110° C. the standard sieves (Nos. 60, 80, 100 and 200), cool, and weigh accurately. Weigh an amount of grit paste soap containing 10 g of insoluble siliceous material (Section F-2-f), transfer to a beaker, add abount 200 ml of water and digest on a steam bath about one hour to dissolve the soluble matter. Pour the solution through the No. 60 sieve, wash the insoluble matter from the beaker on to the sieve with hot water and wash with water, catching all of the liquid and solid matter passing through the sieve in clean beakers or dishes. The washing with water shall be continued until 200 ml of the liquid passing through the sieve into a clean 400 ml beaker fails to show any particles collected about the middle of the bottom of the beaker after the liquid has been vigorously stirred and the beaker placed on a black surface. Dry the sieve and residue for one hour at 105° to 110° C., cool, and weigh. Calculate the percentage of residue retained on the No. 60 sieve, based on the insoluble siliceous material. (If the material forms lumps or aggregates on washing with water, a camel's-hair brush may be used on the sieve.)

In a similar manner transfer all of the material (liquid and solid) that has passed through the No. 60 sieve to the No. 80 sieve and wash with water until 200 ml of the liquid passing through the sieve into a clean 400 ml beaker fails to show any particles collected about the middle of the bottom of the beaker after the liquid has been vigorously stirred and the beaker placed on a black surface. Dry the sieve for one hour at 105° to 110° C., cool, and weigh. Add the weight of the residue retained on the No. 60 sieve to the weight of the residue found on the No. 80 sieve and calculate the sum to percentage of residue retained on the No. 80 sieve, based on the insoluble siliceous material.

In a similar manner transfer all of the material (liquid and solid) that has passed through the No. 80 sieve to the No. 100 sieve and wash with water until 200 ml of the liquid passing through the sieve into a clean 400 ml beaker fails to show any particles collected about the middle of the bottom of the beaker after the liquid has been vigorously stirred and the beaker placed on a black surface. Dry the sieve for one hour at 105° to 110° C., cool, and weigh. Add the weight of the residue retained on the No. 80 sieve to the weight of the residue found on the No. 100 sieve and calculate the sum to percentage of residue retained on the No. 100 sieve, based on the insoluble siliceous material.

In a similar manner transfer all of the material (liquid and solid) that has passed through the No. 100 sieve to the No. 200 sieve and wash with water until 200 ml of the liquid passing through the sieve into a clean 400 ml beaker fails to show any particles collected about the middle of the bottom of the beaker after the liquid has been vigorously stirred and the beaker placed on a black surface. Dry the sieve for one hour at 105° to 110° C., cool, and weigh. Add the weight of the residue retained on the No. 100 sievel to the weight of the residue found on the No. 200 sieve and calculate the sum to percentage of residue retained on the No. 200 sieve, based on the insoluble siliceous material. If desired the series of sieves may be nested together, so that the liquid and solid matter passing through a sieve is transferred directly to the next sieve in the series.

Type II. Run as described under Type I, using standard sieves Nos. 60, 100 and 200, and an amount of scouring powder containing 10 g of insoluble siliceous material (Section F-2-f). F-2-j. Rosin. A qualitative test for rosin may be made as follows: After decomposing a water extract of the detergent and

(Turn to Page 65)



New Products

Two new packages for naphthalene recently adopted by the White Tar Company of Kearny, N. J., a division of the Koppers Products Company, Pittsburgh.

A new jar for automobile wax paste recently adopted by the Auto Color Wax Company. The wax is available in various colors. The container is sealed with an Amerseal Cap.





A counter display for Woodbury's Famous Treatments. Jergens of Cincinnati makes the well-known Woodbury line. The display was manufactured by the U.S. Printing & Lithographing Co., also of Cincinnati.

and Packages



A shoe cleaner and a dental cream packed in the new Turret Tube with the attached moulded cap. A striking development in tube design by Anchor Cap and Closure of Long Island City.



Gulf Refining of Pittsburgh completely revamps its line of containers for sprays, cleaning fluid, polishes, and other products, adopting a uniform and much simplified design throughout. Paradichlorbenzene crystals under the name of Klinzmoth for the retail trade put up in a simple, attractive fibre can by the Klinzmoth Chemical Company of New York. Can by Cin-Made of Cincinnati.





NEWPORT WOOD ROSINS are distilled under laboratory control, insuring absolute uniformity of color, solubility and quality. Thus you never run the risk of variation, which lurks in rosins assembled from many sources and produced under unstable conditions. Such rosins are bound to seriously affect the uniformity of your finished product. (When you buy Newport Wood Rosins, of whatever color, you can depend upon every re-order of a stated grade being identical with the original shipment. C Also makers of Newport Superior Brand Steam Distilled Wood Turpentine and Pine Oil.

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P & G Buy Hewitt Control

Procter & Gamble Co. has acquired a controling interest in the Hewitt Brothers Soap Co., Dayton, Ohio. The Hewitt plant will continue to be operated as an independent unit without any change in personal. A new company has been formed and the name changed to the Hewitt Soap Co., Inc., dropping the word "Brothers" which has been part of the name for almost fifty years. The officers and management which will remain unchanged include James Hewitt, president and treasurer; Martin Schulties, with headquarters at the New York office of the firm, vice-president; Samuel Finn, secretary; Frank R. Dinwiddie, assistant treasurer.

The phenominal growth of the Hewitt business during the past five years and during the period when general soap tonnage was on the decline, had attracted much attention. The firm doubled its plant capacity about a year ago, and has still been reported operating on a basis of three eight-hour shifts daily. The gross business of the company is estimated at approximately \$2,500,000 yearly. About 225 people are employed in the plant. The firm owns the various "Easy Task" brands and does a large private brand business. The company will celebrate its fiftieth anniversary next year, having been founded in 1884 by George A. Hewitt and Archie Hewitt, and incorporated in 1901. In the transaction, R. R. Deupree, president of Procter & Gamble Co., acted for his company, and James Hewitt for his firm.

Allen B. Wrisley Co., Chicago, has just been successful in securing an order from Utility Specialties Corp., New York, for 27,000 gross of assorted types of toilet soap. A. Joseph Ferolie was the Wrisley salesman who secured the contract.

Silver Dust in N. Y.

"Silver Dust," the companion product to "Gold Dust," of the Gold Dust Corp., New York, has finally reached the New York market after an extensive series of tryouts in Albany, Philadelphia, Buffalo and Pittsburgh. The new product, a white powdered soap for washing dishes, is being merchandised aggressively, with all of the commonly used forms of advertising being employed in a wave of publicity to bring "Silver Dust to the attention of as many users as possible within the shortest space of time. House-to-house sampling distribution of premiums, loudspeaker announcements from aeroplanes and radio broadcasting programs are only a few

of the methods being used. The product is packaged in 16-ounce boxes at 15 cents each. A special intro-

Reduce Soap Freight Rates

Lower rates on soaps and related articles from midwest to southern points will apply as the result of a decision of the Interstate Commerce Commission in 4th section application No. 14922, brought by Southern Railway. The railroads affected have been allowed to set aside the long-and-short-haul provisions of section 4, reducing rates from 14 to 19c per 100 lbs. as follows: 36 cents from Cincinnati, O., Louisville, Ky., and Jeffersonville, Ind., to Greenville, Vicksburg and Natchez, Miss., and New Orleans and Baton Rouge, La., and from St. Louis, Mo., to New Orleans and of 31 cents from Cincinnati, Louisville and Jeffersonville to Memphis, Tenn., subject to usual circuity and combination limitations.

Levers Lose Whale Oil Controversy

Lever Bros. and Unilever, Ltd., London, are losers in the whale oil controversy with two Norwegian whale oil companies as a result of the final decision in the matter by the British House of Lords, reversing previous decisions of the High Court and Court of Appeals. A contract covering the 1930-1931 whale season was at issue, the point of contention being whether the Levers had agreed to take at a fixed price the whole output of the two companies or merely the quantity which two floating factories could carry. A drop in the price of whale oil made purchase of additional oil unwise. Damages of £447,160 were claimed by the Norwegian whaling companies, and their final settlement will be fixed by the court if an agreement is not reached. From 1932 profits Lever Bros. set aside £250,000 for contingencies, and if the cost of the present case is charged against this reserve the 1933 dividend may not be affected.



ductory offer includes two packages and a free "Patex" towel at 27 cents.



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Facial Creams
Shaving Creams
Bath Salts
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Lotions, etc.

We prepare finished odors for any special purpose to fit any required cost limit.

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"The integrity of the house is reflected in the quality of its products"

CHICAGO TRADE NOTES

THE first golf tournament of the season, held by the Chicago Drug and Chemical Association and the Chicago Perfumery, Soap and Extract Association at Itasca Country Club on May 16, drew a crowd of thirty members. The following prizes were awarded. Class A: first prize, Elmer F. Smith, American Aniline Products, Inc., with 79-5, net 74; second prize, H. E. Dunning, American Commercial Alcohol Corp., with 86-11, net 75; third prize, A. C. Drury, A. C. Drury & Co., with 87-11, net 76; Class B: first prize, Frank Z. Woods, Frank Z. Woods Co., with 98-19, net 79; second prize, J. H. Swart, Hazel-Atlas Glass Co., with 93-12, net 81; third prize, G. M. Van Kirk, Hazel-Atlas Glass Co., with 93-12, net 81; Class C: first prize, John Buslee, Neumann-Buslee & Wolfe, Inc., with 105-28, net 77; second prize, W. Kedzie Teller, Columbus Laboratories, with 107-26, net 81; third prize, C. A. Hammond, F. N. Burt Co., Ltd., with 104-22, net 82. The joint auxiliary of the two associations now lists over forty members. Tournaments will be held each month, through September.

The Chicago Drug and Chemical Association held its last meeting of the season on May 25 at the Chicago Athletic Club. The speaker was Harold D. Eide, adventurer, explorer and friend of the late Roald Amundsen. He delivered an illustrated lecture on "Building a City in the Shadows of the North Pole." This association has officially appointed a Century of Progress Committee, consisting of F. L. McCartney, chairman, M. B. Zimmer, A. J. Rocca and A. G. Schneider. The purpose of the committee is to supply information regarding the world's fair and extend such courtesies as it can to visiting members of associations in other cities and other representatives of the trade. The association recently admitted three new members. They are: Harold W. Cochran, of Atlantic City Gelatin Co., Ed. Davis, of Davis & Davis, Inc., and Samuel S. Kovacs, of Rural Mfg. Co., of Duquesne, Ia. Regular meetings will be resumed on the last Thursday of September.

Benjamin Heller, president of B. Heller & Co., chemical manufacturers, died at his home on May 23. He is survived by his widow, two daughters and a son.

G. M. Van Kirk & Associates, midwest representatives for Hazel-Atlas Glass Co., recently moved into more commodious quarters in the Builders Building at 228 N. La Salle St.

Owens-Illinois Glass Co., Toledo, has announced purchase of the entire assets and business of Hemingray Glass Co., Muncie, Ind. Substantially all the assets of the O'Neill Machine Co., Toledo, have also been ac-

quired. Another recent development is the purchase of 16,000 shares of the preferred stock of Container Corp. by Owens-Illinois.

At the convention of the American Medical Association, held in Milwaukee June 6 to 12, toilet preparations were exhibited from Elmo, Inc., of Philadelphia, Pa., and P. Beiersdorf & Co., of Long Island City, N. Y.

A Century of Progress, which opened on May 27, is proving every bit as much of a magnet for visitors as was expected. Over 300,000 people were admitted on the first day. Members of the trade are making extensive plans to entertain out of town customers, for the exhibits in the Science Group afford remarkable opportunities for the study of industrial progress. It is expected that over thirty million will see the fair before its close.

The Chicago Perfumery, Soap and Extract Association will not hold a Stag Picnic this year. Regular meetings will be resumed on the first Tuesday of September.

Harris Heads American Oil Chemists

John P. Harris, manager of the Chicago office of industrial Chemical Sales Co., New York, and widely known throughout the soap and oil industries, was elected president of the American Oil Chemists' Society at the recent meeting in New Orleans. Mr. Harris joined Armour & Co. as a chemist shortly after his graduation from the University of Kansas in 1907. Subsequently he was with the Phoenix Cotton Oil Co. in Memphis, Allbright Nell Co. and the Institute of American Meat Packers. For the past six years he has been Chicago manager for Industrial Chemical Sales Co. Mr. Harris has been a member of the American Oil Chemists' Society and active in the affairs of that organization since 1919. He was instrumental in starting the annual A.O.C.S. bowling tournament which is one of the features of annual meetings of that organization.

Victor Builds Plant for Fair

Victor Chemical Works, Chicago, has reserved exhibition space at the Chicago World's Fair, A Century of Progress, and will show a miniature replica of the Victor plant at Nashville, Tenn. The model shows the plant in operation. The exhibit will also include various of the company's products, including trisodium phosphate, monocalcium phosphate, sodium acid pyro phosphate, tricalcium phosphate, etc. After being shown at the fair, the model plant will be put on permanent exhibition in the Museum of Science and Industry, Chicago.

Hijos de Francisco Navarro, essential oils, formerly at 35 S. William St., New York, has moved to 119 Nassau Street.



DISINFECTANTS CONTAINING YARMOR PINE OIL DO THE WORK!

- 1. They rid the premises of flies and mosquitoes.
- 2. They are non-corrosive to metals.
- 3. They are non-toxic to human beings.
- 4. They kill disease-producing bacteria.
- 5. They form a milky white solution with water.
- 6. They leave a pleasant piney aroma wherever applied.

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PERSONAL AND IMPERSONAL

Robert J. Anderson, chief engineer for Procter & Gamble Co., died May 31 at his home in Cincinnati at the age of seventy-two. He had been with the company for thirty years, and was widely known in civic, religious and fraternal circles. He is survived by his widow, Mrs. Lucy B. Anderson, a son, Robert W. Anderson, a daughter, Mrs. Martha Shepherd, and a brother, A. E. Anderson.

Prize awards in the ninth annual exhibition of small sculptures in white soap, sponsored annually by Procter & Gamble Co., were made June 6th by the National Soap Sculpture Committee at the National Alliance of Art & Industry, New York.

George F. Siddall & Co., Providence, R. I., is installing soap manufacturing equipment in a plant recently acquired at Spartanburg, S. C.

Levi Rokeach, vice-president of I. Rokeach & Sons, Inc., Brooklyn, manufacturers of kosher soaps, died in Montreal, Canada, early in May, while on a visit to the local Rokeach branch factory.

Made with the fibre and oil of alligator pears, "Avacado Tissue" soap is now being pushed in Pacific Coast chain stores at 10 cents a cake. It is backed with radio advertising, and will be extended to other distribution outlets if sales are sufficiently promising at the new price. For about two years it had been sold through department stores at 20 cents a cake. "Avacado Tissue" soap is made by Segerstrom Soap Co., 911 N. Los Angeles St., Anaheim, Calif., and distributed through Rabin & Kirschbaum, 820 McGarry St., Los Angeles.

Green Oil Soap Co. is reported to have advanced prices of all its high quality soaps June 1. W. M. Kelso, president of Green Oil Soap Co., states that business during the first quarter of 1933 was 14% above figures for the preceding quarter.

Alfred E. Cleveland, head of Flash Chemical Co., Cambridge, Mass., died in that city in May at the age of sixty-two. Flash Chemical Co. was organized by Mr. Cleveland in 1906, the first product being "Flash", a mechanics' hand soap.

The Curran Corp., 114 Central St., Somerville, Mass., is offering a new solvent for grease, oil, dirt, etc., under the trade name "Gunk." The new product is applied with a paint brush until all of the grease and dirt have been dissolved to a thin black liquid. The surface is then sprinkled with water and a light brushing turns the coating into soap. The new product is offered in anything from single gallon cans up to 54 gallon drums. "Gunk" is intended especially for cleaning motors, cement floors, brushes and for rust removal.

J. B. Williams Co. of Canada is building a new \$45,000 plant at Ville La Salle, Canada, a suburb of Montreal. Construction has been started by Laurentide Construction Co., Montreal. The plant will be of structural steel.

New officers have recently been elected by Ph. Chaleyer, Inc., essential oils and aromatics, New York, as follows: president, Philip Chaleyer; vice-president, Dr. F. A. Kertess; treasurer, M. C. Chaleyer; and secretary, C. Kestenbaum. Ph. Chaleyer is now taking an active interest in the manufacture of aromatic chemicals for soap perfuming. A number of bouquet odors especially suited for soap perfuming have recently been developed.

The laundry research department of Procter & Gamble Co. has recently issued a booklet entitled "Salvaging Linen by Stain Removal". The 12-page booklet gives specific instructions for removing stains from linen.

C. L. Frederick, until recently connected with Colgate-Palmolive-Peet Co., has joined Parket Pen Co. as vice-president in charge of sales and advertising.

The edible products division of Procter & Gamble Co. has just announced a new cake shortener under the name "Sweetex". Sales will be to the baking, hotel and restaurant trade and the product will not be advertised to the public. The Blackman Company is directing an advertising campaign in business papers.

Warren Soap Mfg. Co., formerly located at 77 Summer St., Boston, has moved to Kendall Square, Cambridge, Mass.

COLOROMES

- They perfume and color in one single operation
- COLOROMES are also available without color.

FELTON CHEMICAL COMPANY, INC.

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CHICAGO, ILL.
M. HARTSTEIN,
1200 No. Ashland Ave.

NEW ORLEANS, LA. ROBERT E. FELTON, Balter Bldg., Rm. 407 In introducing "Dee's Lemon Toothpaste" in the Chicago market the Dee's Manufacturing Co. distributed free samples to consumers and also introduced the novel idea of giving two small-size tubes for children with each retail purchase of a regular size tube. Schweizer-Steitz Co., Chicago advertising agency, is handling the account.

A new soap products enterprise recently started in the British Isles has acquired a large modern factory at Farnworth, near Widnes, and has installed machinery for the manufacture of soap, soap powders, and similar soap products. This is only one of a number of new manufacturing developments that have resulted from the recently-imposed Import Duties Act.

Mennen Co., Newark, announces the appointment of Frank G. Abbott, formerly of McKesson & Robbins, Inc., as sales manager.

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F. S. Dieterich has joined Mennen Co. and will take charge of advertising and sales promotion. He was formerly with Frank Presbrey Co.

Advertising of "Lux" flakes in Canada has been placed with J. Walter Thompson Co. by Lever Bros. of Canada.

The plant of the Akron Soap Co, was damaged to the extent of about \$2,000 in a fire which occurred early in May.

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The marriage has been announced of Miss Julia Pailet and Robert E. Felton, May 28th, at the bride's home in New Orleans. Robert Felton is a nephew of Dr. Joseph Felton, and New Orleans' representative for Felton Chemical Co.

Joseph Wafer, for a number of years connected with Industrial Chemical Sales Co., New York, and well known throughout the chemical industry, joins Rossville Commercial Alcohol Corp. June 15th as sales manager.

F. W. Fitch Co., Des Moines, maker of "Fitch's Shampoo", has appointed L. W. Ramsey Co. to direct its advertising account. The company enjoyed a good year in 1932 and is expanding its advertising program during 1933.

The index of employment in the soap industry for April, 1933, stood at 94.0, compared with 93.7 in March and 96.5 in April, 1932. The 12-month average for 1926 is taken as 100. The pay roll index stood at 76.8 in April, 1933, as against 76.3 in March and 90.5 in April, 1932.

Dr. E. A. Rykenboer has just been appointed manager of the R. & H. chemicals department of E. I. du Pont de Nemours & Co., succeeding C. K. Davis. Milton Kutz succeeds Dr. Rykenboer as assistant general manager.

Inter-State Products Corp., 1260 Factory Place, Los Angeles, is introducing a new washing compound under the name "Ipsco."

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New Orleans Chemical Co., New Orleans, has started sale of "Sacco" brand shaving cream and other toilet preparations. H. T. Underwood heads the company.

National Oil Products Co., Harrison, N. J., is introducing "Admiracion" shampoo in the Canadian territory, representatives being Wellman Sales, Ltd., Toronto.

Household Products Mfg. Co., granulated soap, has opened a branch office at 4956 Whittier Blvd., East Los Angeles, Calif.

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Standard Silicate Co., Pittsburgh, has issued the second edition of "Cleaner Clothes", a booklet describing the use of sodium metasilicate in the laundry.

Final reports on the 1931 census of soap manufacture have been filed by the U. S. Bureau of the Census. Copies are available through the Superintendent of Documents, Washington, at five cents each.

The Association of Canadian Perfumers and Manufacturers of Toilet Articles met at Lucerne, Quebec, Canada, June 6 and 7.

Colgate-Palmolive-Peet Co., Ltd., of Canada, plans to spend sixty per cent more for advertising in 1933 than was spent in 1932, according to a report from Montreal. Every newspaper of importance in the Dominon will be used, it is stated.

W. E. Wilkinson, soap consultant, has been made superintendent of the new soap plant of Carman & Co., New York laundry supply manufacturers, at Boonton, N. J.

E. M. Davis Soap Co., 236 W. North Ave., Lincoln Park Sta., Chicago, has been moved to 560 W. Randolph St., Canal Station, Chicago.

St. Croix Soap Mfg. Co., St. Stephens, N. B., Canada, plans an addition to its plant.

Pepsodent Co., Chicago, has introduced a new facial cream under the name "Junis".

Our new "Count Seven" Metal Polish does by arithmetic what the porter used to do by perspiration.

Private labeled under this or other name also in bulk

COUNT
"7"
POLISH

METALS

He spreads if it for a few s 'wipes it off. L No more ter And the shim chemical gair

THREE FOUR FIVE

He spreads it on a badly tarnished surface, —leaves it for a few seconds (while he counts seven), —then 'wipes it off. Underneath the metal is dazzeling bright. No more tarnish, no mess, AND NO RUBBING! And the shine lasts longer because this new mild chemical gaint does not etch or scratch the surface.

Write for prices and samples.

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For Shipping and Storing Liquids or Solids

—the BENETCO Removable Head Barrel
with INSIDE LOCKING RING



THIS exclusive Wilson & Bennett shipping-storage container has distinct advantages over anything of its type made. It is the first and only removable-head barrel with the locking ring fitted inside the rim, where it is fully protected by the side-wall from damage in transit or storage.

Only a simple flip of the lever is required to seal or open the barrel, and when in locked position the inside locking ring provides an air-tight and liquid-proof closure.

Quickly filled or emptied—ready access to contents in storage—convenient to clean for refilling—IT IS A REAL TIME AND EXPENSE SAVER.

Because of these outstanding features, this barrel has exceptionally high re-use and resale value. Send for complete details—no obliga-

WILSON & BENNETT MFG. CO.

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Cortez & Bienville Sts.
NEW ORLEANS, LA.

Galvez 2171

General Offices 6528 S. Menard Ave. CHICAGO

Republic 0200

Eastern Division 437 Third Street JERSEY CITY, N. J.

Montgomery 5-2340

RECORD OF TRADE-MARKS

The following trade-marks were published in the May issues of the Official Gazette of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

Trade Marks Filed

Admiracion—This in letters resembling script describing soaps, cleaners, shaving creams, polishes, etc. Filed by National Oil Products Co., Harrison, N. J., Nov. 12, 1932. Claims use since Oct. 1, 1918.

WATER QUEEN—This in outline letters with drawing of woman and swans, describing soap. Filed by Colgate-Palmolive-Peet Co., Chicago, March 17, 1933. Claims use since 1892.

FLEET—This in solid letters describing shaving cream. Filed by Fay Wood Corp., New York, Mar. 13, 1933. Claims use since Oct. 13, 1932.

W-B—This in solid letters on barrel against background of office building, describing liquid soaps and cleaners. Filed by Wilson & Buster, Inc., Kansas City, Mar. 20, 1933. Claims use since No. 10, 1932.

Tunso—This in solid letters describing laundry and toilet soap. Filed by Colgate-Palmolive-Peet Co., Chicago, Mar. 21, 1933. Claims use since September, 1926.

PEARLEDENT—This in solid letters describing dentifrices. Filed by Bomar Products, Chicago, July 22, 1931. Claims use since June 23, 1931.

Lustress—This in solid and reverse letters against block showing head of woman, describing shampoo. Filed by La Fontaine, Ltd., Glendale, Cal., Dec. 20, 1932. Claims use since Dec. 26, 1929.

IPANA—This in solid letters on carton describing toothpaste. Filed by Bristol-Myers Co., New York, Feb. 23, 1933. Claims use since October, 1915.

KITCHEN POLICE—This in outline and solid letters describing cleaners. Filed by K-O, Inc., Cleveland, Mar. 24, 1932. Claims use since Mar. 3, 1932.

Elf—This in solid letters describing hollow implement containing a detergent. Filed by Expello Corp., Dover, N. H., Mar. 11, 1933. Claims use since Mar. 7, 1933.

STEARN'S ELECTRIC PASTE—This on carton describing vermin and insect poison. Filed by Stearn's Electric

Paste Co., Chicago, Feb. 16, 1933. Claims use since June, 1928.

LETHELIN—This in solid letters describing fumigant. Filed by Lethelin Products Co., Manhasset, N. Y., Mar. 7, 1933. Claims use since Nov. 1, 1932.

Dairy King—This in solid letters with "F. W. Mc-Ness" in script, describing insecticides. Filed by Furst-McNess Co., Freeport, Ill., Mar. 10, 1933. Claims use since Feb. 1, 1933.

No-Mo-Roach—This in solid letters describing roach exterminator. Filed by Red Circle Products Co., Houston, Mar. 24, 1933. Claims use since Feb. 25, 1933.

Palmer's—This in solid letters describing medicinal and toilet soap. Filed by E. T. Browne Drug Co., New York, Apr. 7, 1932. Claims use since Dec. 1, 1886.

Allstate—This in solid letters on outline map of United States describing soap, polish and cleaner. Filed by Sears, Roebuck & Co., Chicago, Mar. 15, 1933. Claims use since Dec. 5, 1932.

Decorative Wrapper describing soap. Filed by Fitzpatrick Bros., Inc., Chicago, Mar. 20, 1933. Claims use since Jan. 1, 1933.

FOME—This in solid letters on wrapper describing soap. Filed by Fitzpatrick Bros., Inc., Chicago, Mar. 20, 1933. Claims use since Jan. 1, 1933.

La Sol—This in solid letters with animated sun as background describing laundry soap. Filed by Sunland Soap Co., Los Angeles, Mar. 29, 1933. Claims use since Aug. 1, 1931.

Brillo—This in solid letters on carton describing cleaning pads. Filed by Brillo Mfg. Co., Brooklyn, Mar. 30, 1933. Claims use since December, 1931.

Onkor.—This in solid outlined letters describing granulated soap. Filed by Nassour Bros., Inc., Los Angeles, Mar. 31, 1933. Claims use since Dec. 30, 1932.

Flosol—This in solid letters describing insecticides. Filed by Electro Chemical Processes, Ltd., London, England, Dec. 29, 1932. Claims use since Apr. 2, 1932.

N.D.K.—This in solid letters describing tooth paste. Filed by McCarthy Bros., Milwaukee, Feb. 6, 1933. Claims use since Nov. 21, 1932.

JAP SOAP—This in solid letters describing insecticide. Filed by Chipman Chemical Co., Bound Brook, N. J., Feb. 28, 1933. Claims use since Jan. 5, 1933.

ALLSTATE—This in solid letters on outline map of United States describing disinfectant. Filed by Sears,

Roebuck & Co., Chicago, Mar. 15, 1933. Claims use since Nov. 30, 1932.

Hybrex—This in shaded letters describing insecticide. Filed by Hercules Powder Co., Wilmington, Mar. 18, 1933. Claims use since Mar. 7, 1933.

Dr. Lyon's—This in outline letters on carton describing dentifrices. Filed by R. L. Watkins Co., New York, Mar. 18, 1933. Claims use since January, 1932.

Kilbits—This in solid letters describing rat poison. Filed by Berner & Zetterstrom Aktiebolag, Gottenborg, Sweden, Mar. 31, 1933. Claims use since May, 1920.

Keeno—This in outline letters describing cleaner. Filed by Keene Washing Products Co., Keene, N. H., Feb. 24, 1933. Claims use since Apr. 1, 1927.

IT—This in solid letters on circular plate describing cleaning powder. Filed by "It" Products Co., Waban, Mass., Mar. 6, 1933. Claims use since June, 1932.

TOP O' THE MORNING—This in script describing shaving cream. Filed by Samuel L. C. Lee, San Francisco, Apr. 12, 1933. Claims use since Nov. 17, 1932.

Manganar Rose Dust—This in solid letters describing insecticide. Filed by Grasselli Chemical Co., Cleveland, Mar. 2, 1933. Claims use since Apr. 2, 1930.

WHITE KING—This in solid letters describing radiator glycerin. Filed by Los Angeles Soap Co., Los Angeles, Mar. 20, 1933. Claims use since Nov. 5, 1932.

LUGOLINE—This in solid letters describing antiseptic. Filed by Lugoline Chemical Co., Butte, Mont., Mar. 20, 1933. Claims use since Dec. 23, 1932.

Monday Light—This in solid letters with drawing of women washing clothes, describing washing preparation. Filed by Monday Light Chemical Co., Greensburg, Pa., Mar. 21, 1933. Claims use since Feb. 21, 1933.

Parahydrecin—This in solid letters describing antiseptics and germicides. Filed by Norwich Pharmacal Co., Norwich, N. Y., Mar. 23, 1933. Claims use since May, 1932.

Z-L—This in solid letters describing antiseptic and germicide. Filed by Norwich Pharmacal Co., Norwich, N. Y., Mar. 23, 1933. Claims use since February, 1929.

Castile Infanta—This in solid letters with words "Baby Soap" and reverse plate of baby's head, describing soap. Filed by Babiglo Co., New York, Apr. 19, 1932. Claims use since June, 1925.

PINAUD—This in solid letters describing toilet and shaving soaps. Filed by Pinaud, Inc., New York, Feb. 10, 1933. Claims use since 1840.

WHITE GOLD—This in outline letters describing laundry soap. Filed by Sunland Soap Co., Los Angeles, Mar. 29, 1933. Claims use since Aug. 1, 1931.

Sacco—This in solid letters describing shaving cream. Filed by San Antonio Chemical Co., San Antonio, Apr. 3, 1933. Claims use since Jan. 1, 1933.

Pynaseptic—This in outline letters describing soap. Filed by Iowa Soap Co., Burlington, Ia., Apr. 17, 1933. Claims use since Mar. 21, 1933.

E A—These letters in form of monogram describing

soap. Filed by Elizabeth Arden, Inc., New York, Apr. 21, 1933. Claims use since April, 1926.

T.P.—These letters within circular lines describing disinfectant. Filed by Charles Perkins, Vancouver, B. C., Canada, Nov. 22, 1932. Claims use since Mar. 7, 1931.

66—These figures describing insecticides and radiator cleaner. Filed by Phillips Petroleum Co., Bartlesville, Okla., Dec. 7, 1932. Claims use since June 3, 1931, on cleaner, and Nov. 12, 1932, on insecticide.

JOHNSON STOK-SPRA—This on circular reverse plate describing insecticides. Filed by Johnson Oil Refining Co., Chicago, Dec. 31, 1932. Claims use since Oct. 26, 1932.

MURIS—This in shaded letters together with seal describing antiseptic, disinfectant, insecticide, etc. Filed by Mutual Service, Newark, N. J., Feb. 17, 1933. Claims use since Oct. 9, 1932.

Olgon—This on reverse plate describing disinfectant, cleanser, etc. Filed by Olgon Chemical Co., Chicago, Mar. 24, 1933. Claims use since May 17, 1932.

Delvo—This in outline letters describing cleaners and water softeners. Filed by H. & L. Products Co., Linden, N. J., Mar. 28, 1933. Claims use since Dec. 10, 1932.

44—These figures describing insecticide. Filed by Phillips Petroleum Co., Bartlesville, Okla., Mar. 30, 1933. Claims use since Mar. 17, 1933.

SQUIBB—This in outline letters with other matter printed on collapsible tubes, describing dentifrices. Filed by E. R. Squibb & Sons, New York, Apr. 1, 1933. Claims use since Feb. 24, 1933.

Trade Marks Granted

302,833. Antiseptic and Deodorant. Phoenix Preparations, Scranton. Filed November 23, 1932. Serial No. 332,433. Published February 14, 1933. Class 6.

302,851. Dental Cream. Colgate-Palmolive-Peet Co., Chicago. Filed December 2, 1932. Serial No. 332,688. Published February 14, 1933. Class 6.

302,858. Soaps. Plymouth Products Co., Syracuse, N. Y. Filed December 9, 1932. Serial No. 332,927. Published January 31, 1933. Class 4.

302,864. Insecticidal Sprays. Union Oil Company of California, Los Angeles. Filed January 11, 1932. Serial No. 322,899. Published March 15, 1932. Class 6.

302,873. Deodorants. Sitroux Importing Co., Brooklyn. Filed December 19, 1932. Serial No. 333,205. Published February 21, 1933. Class 6.

303,007. Insecticides. Lewy Chemical Co., New York. Filed December 15, 1928. Serial No. 276,793. Published February 21, 1933. Class 6.

303,019. Antiseptic Tablets. Boericke & Tafel, Inc., Philadelphia. Filed January 20, 1932. Serial No. 323,187. Published February 21, 1933. Class 6.

303,027. Automobile Polish and Wax. Standard Oil Company of California. San Francisco. Filed January 21, 1933. Serial No. 334,234. Published February 28, 1933. Class 16.

303,046. Polishing Wax. Wilbur White Chemical Co., Owego, N. Y. Filed January 3, 1933. Serial No. 333,621. Published February 28, 1933. Class 16.

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303,062. Shaving Cream. George R. Pond, New York. Filed January 3, 1933. Serial No. 333,604. Published February 21, 1933. Class 4.

303,071. Toilet Soap. Kirkman & Son, Inc., Brooklyn. Filed January 9, 1933. Serial No. 333,768. Published February 21, 1933. Class 4.

303,130. Shoe Cleaner and Shaving Cream. Tidee Products, Dayton, Ohio. Filed November 22, 1932. Serial No. 332,435. Published February 21, 1933. Class 4.

303,155. Powdered Soap. Colgate-Palmolive-Peet Co., Chicago. Filed January 9, 1933. Serial No. 333,758. Published March 7, 1933. Class 4.

303,157. Cream Hand Soap. Ditbro Research Laboratories, Inc., New York. Filed January 7, 1933. Serial No. 333,728. Published February 28, 1933. Class 4.

303,172. Cleansing, Scouring, and Polishing Compound. Enoch Morgan's Sons Co., New York. Filed December 7, 1932. Serial No. 332,850. Published February 28, 1933. Class 4.

303,175. Cleaning Compounds. Blesant Laboratories, Inc., New York. Filed December 7, 1932. Serial No. 332,833. Published February 28, 1933. Class 4.

303,181. Soap. Calite Manufacturing Co., Los Angeles. Filed December 2, 1932. Serial No. 332,681. Published March 7, 1933. Class 4.

303,187. Washing Powders. John D. Lee, Denver. Filed Nov. 17, 1932. Serial No. 332,232. Published Feb. 28, 1933. Class 4.

303,276. Soap Flakes. Defiance Soap Co., Los Angeles. Filed January 20, 1933. Serial No. 334,145. Published February 28, 1933. Class 4.

303,280. Insecticide and Disinfectant. The Thorocide Co., St. Louis. Filed January 18, 1933. Serial No. 334,061. Published February 28, 1933. Class 6.

303,282. Insecticides, Germicides, and Fungicides. California Spray-Chemical Corp., Berkeley, Calif. Filed January 18, 1933. Serial No. 334,044. Published February 28, 1933. Class 6.

303,288. Silver Polish. Ada Baldwin, Philadelphia. Filed January 17, 1933. Serial No. 333,999. Published February 28, 1933. Class 4.

303,299. Deodorants, Disinfectants, Insecticides, etc. West Disinfecting Co., Long Island City, N. Y. Filed March 2, 1931. Serial No. 311,634. Published March 14, 1933. Class 4.

303,355. Washing Compound. Shelby Home Products Co., Shelby, Ohio. Filed December 31, 1932. Serial No. 333,562. Published March 14, 1933. Class 4.

303,382. Facial Soap. Frances Fleischmann Soap Products, West Haven, Conn. Filed January 18, 1933. Serial No. 334,052. Published March 14, 1933. Class 4. 303,389. Soap. Fred B. Ashton, St. Louis. Filed September 6, 1932. Serial No. 330,143. Published March 14, 1933. Class 4.

(Continued on Page 43)

New Patents

Conducted by

Lancaster, Allwine & Rommel

Registered Attorneys

PATENT AND TRADE-MARK CAUSES

815 15th St., N. W., Washington, D. C.

Complete copies of any patents or trade-mark registration reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.

No. 1,903,614. Disinfecting Solution, Patented April 11, 1933, by George M. Karns and Leonard H. Cretcher, Pittsburgh, Pa., assignors to Iodine Educational Bureau, Inc., a Corporation of New York. A disinfecting solution of free iodine in a solvent which itself is an aqueous solution of sodium iodide, potasium iodide, and calcium iodide, in substantially the ratio of 1104:48:32.

No. 1,903,864. Textile Pest Proofing Media, Patented April 18, 1933, by Winfrid Hentrich and Max Hardtmann, Wiesdorf, Peter Backes, Cologne-Deutz, and Hermann Stotter, Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. A textile pest proofing medium containing a water soluble salt of selenic acid.

No. 1,903,920, Automatic Machine for the Manufacture of Soap Bars, Patented April 18, 1933, by Alfred Theodor Hunten, deceased, Koppern in the Taunus, Germany, by Gertrud Hunten, widow and administratrix, Frankfort-on-the-Main, Germany. An automatic machine for the manufacture of soap bars, comprising, in combination, four endless bands forming between them a space for the reception of hot liquid soap mass, cooling means arranged between the bands, guiding members located at the corners of the space formed by the bands and having grooves therein receiving portions of the bands to form labyrinth packings.

No. 1,904,021. Apparatus for Producing Soap, Patented April 18, 1933; by Hermann Weber, Dusseldorf, and Wilhelm Pape, Benrath-on-the-Rhine, Germany, assignors to the firm Henkel & Cie Gesellschaft mit beschrankter Haftung, Dusseldorf, Germany, a Corporation of Germany. An apparatus for continuously converting fatty acids and mixtures of fatty acids and neutral fats into soap, comprising a main container, means above said container to receive and mix the fatty acids with an amount of a solution of alkali metal carbonate necessary to effect the saponification and to deliver such mixture to the main container, means for continually feeding fatty acids or mixtures of fatty acids and neutral fats and a solution of alkali metal carbonate to the

(Continued on Page 45)

Caustic Soda

High Grade—Solid or Liquid Form

Carbon Tetrachloride

Redistilled—water white—supplied also in combination with other solvents to meet individual requirements

Tri-Sodium Phosphate

Fine granular and powdered. Free-flowing and non-caking



Manufacturers of Industrial Chemicals and Distributors for Westvaco Chlorine Products, Inc.

COLUMBIA III BRAND

98% - 100% CAUSTIC SODA

76% Na₂ O

Solid - Flake Ground - Liquid 99% - 100%

SODA ASH

58% Na₂ O

Light-Dense Feather

THE COLUMBIA ALKALI CORPORATION

Executive Sales Offices, EMPIRE STATE BUILDING, NEW YORK CITY

Branch Sales Offices

431-451 St. Clair St., CHICAGO; Carew Tower, CINCINNATI; Santa Fe Terminal Bldg., DALLAS BARBERTON, OHIO

CONTRACTS AWARDED

In a recent bidding conducted by the Chicago U. S. Army Quartermaster the following bids were awarded: Armour & Co., Chicago, 60 lbs. laundry soap, 2.42c; 420 lbs. do, 2.42c; 3,000 lbs. do, 2.66c; 15,000 lbs. do, 2.42c; 1,020 lbs. do, 2.35c; 9,600 lbs. do, 2.23c; 13,620 lbs. do, 2.61c; 9,600 lbs. do, 2.23c; 9,600 lbs. do, 2.4c; 2,400 lbs. do, 2.46c; 9,600 lbs. do, 2.22c; 3,600 lbs. do, 2.61c; 2,400 lbs. do, 2.08c; 14,220 lbs. do, 2.57c; 3,600 lbs. do, 3.38c; 5,000 cakes toilet soap, 1.025c; 7,200 do, 1c; 200 cakes do, 1.95c; 200 do, 1.97c.

Colgate-Palmolive-Peet Co., Chicago, 11,280 lbs. laundry soap, 2.8c; 10,200 lbs. do, 2.7c; 4,380 lbs. do, 3.08c; 4,980 lbs. do, 2.5c; 4,200 lbs. do, 2.7c;

Procter & Gamble Distr. Co., Chicago, 100 cakes toilet soap, 1.98c; 16,000 cakes, 1.98c.

Western Co., Chicago, 3,400 tubes toothpaste, 7c.

Newell Gutradt Co., San Francisco, has been awarded contract to supply Fort Mason, California, with 123,500 cakes of grit "B" soap, 93 cases of grit "A", and a quantity of castile.

Colgate-Palmolive-Peet Co., Chicago, was recently awarded a contract to supply Chicago U. S. Army Quartermaster with 22,500 lbs. laundry soap at a price of 2.666c. John Sexton & Co., Chicago, awarded 2,400 cakes grit soap at 2.12c.

R. M. Hollingshead Co., Camden, N. J., has been awarded a contract for 900 cans of metal polish at 8.5c and 200 cans at 14c for the Brooklyn U. S. Army Quartermaster. Martin & Martin, Chicago, awarded 5,200 cans stove polish at 6c.

Davies-Young Soap Co., Dayton, has been awarded a contract for 2,000 lbs. soap base for Wright Field, Ohio, Air Corps, at a price of 6c lb.

Terminex Co., Washington, bid \$326.72 on a recent contract for extermination of termites at the Washington navy yard.

Exports of toilet or fancy soap from United States during March, 1933, totaled 476,050 lbs., worth \$60,092. Exports of laundry soaps were 2,050,369 lbs., worth \$100,030.

Trade Marks Granted

(Continued from Page 41)

303,402. Hand Soap. Wow! Soap Products Co., Hastings-on-Hudson, N. Y. Filed December 6, 1932. Serial No. 332,326. Published March 14, 1933. Class 4.

303,439. Soap Powder Capsules. Edyth C. Tomlin, Washington, D. C. Filed February 2, 1933. Serial No. 334,583. Published March 14, 1933. Class 4.

303,446. Scouring Soap and Cleaning and Polishing Powder. Bon Ami Co., New York. Filed January 23, 1933. Serial No. 334,246. Published March 14, 1933. Class 4.

303,460. Antisoptic. Seydel Chemical Co., Jersey City, N. J. Filed April 19, 1932. Serial No. 326,315. Published March 7, 1933. Class 6.

303,464. Shampoo. Keen Manufacturing Corp., New York. Filed April 3, 1932. Serial No. 325,911. Published March 14, 1933. Class 6.

303,548. Preparation for Use in Killing Ants. Alfred E. Johansen, St. Paul. Filed January 6, 1933. Serial No. 333,705. Published March 21, 1933. Class 6.

303,553. Para-Dichlorobenzene Crystals. Sani-Moth, Inc., Waterloo, Iowa. Filed April 22, 1932. Serial No. 326,368. Published March 21, 1933. Class 6.

303,559. Antiseptic. Sani-Tex Laboratories. Los Angeles. Filed August 29, 1932. Serial No. 329,944. Published March 14, 1933. Class 6.

303,582. Soap. Druggists' Supply Corp., New York. Filed January 27, 1933. Serial No. 334,421. Published March 21, 1933. Class 4.

303,613. Cleansing and Deodorizing Agent. Story & Robinson, Brooklyn. Filed December 12, 1932. Serial No. 333,018. Published February 28, 1933. Class 6.

303,620. Shaving Cream. Pabst Chemical Co., Chicago. Filed December 24, 1932. Serial No. 333,359. Published March 14, 1933. Class 4.

303,623. Antiseptic and Dentifrice. Forhan Co., New York. Filed December 29, 1932. Serial No. 333,-462. Published February 28, 1933. Class 6.

303,637. Antiseptic. L. C. Smith Laboratory, Canton, Ohio. Filed January 3, 1933. Serial No. 333,614. Published February 28, 1933. Class 6.

303,638. Concentrated Base for Insect Destroying Sprays. Robert C. White Co., Philadelphia. Filed January 4, 1933. Serial No. 333,647. Published March 14, 1933. Class 6.

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Market Report on

ESSENTIAL OILS AND AROMATICS

(As of June 8, 1933)

NEW YORK—The tone of the essential oil and aromatic chemical market was distinctly unsettled during the period just concluded. Daily fluctuations in foreign exchanges kept prices in an unstable condition so that buyers were in doubt as to actual selling prices in the market from day to day. The result was a constant inquiry to check up on the latest developments, without, however, leading to any considerable increase in actual sales. It is understood that the essential oil group is planning steps under the Roosevelt Administration's industry recovery legislation, seeking to stabilize the industry, control unwise trade practices and to put an end to sophistication of oils.

OIL ANISE

Anise oil prices held firm this period at 35c. to 37c. pound in spite of a slight drop in silver and Chinese exchange after the sharp advance of last period.

OIL BERGAMOT

Quotations on bergamot oil have again eased off to previous low levels, the current market being \$1.15 to \$1.35 per pound. Lack of demand is the main retarding factor in this market, consumers having removed bergamot from their formulas in many cases due to uncertainty of supply and frequent complaints as to quality.

OIL CASSIA

Quotations on cassia oil advanced again this period, low price stocks having been largely removed from the market and the remaining material being held in firm hands. The current market price is 95c. pound.

OIL CITRONELLA

Due to advances in foreign exchange the cost of importing Ceylon oil was higher this period, with the result that all business done was in domestic stocks which have not as yet advanced above their level of last period. In primary markets arrivals are said to be coming in rather slowly, although domestic stocks are sufficient to take care of normal demand here.

OIL PEPPERMINT

Peppermint oil prices were again advanced substantially this period, few sources quoting any lower than \$2.40 to \$2.50 pound, as against \$2.10 last month. In some quarters the opinion is expressed that lower levels will be reached within the next few weeks as distillation of new crop mint will start within a short time. Stocks are believed to be strongly held in the middle west, however, and continued firmness would not be unusual.

The output of soaps and washing compounds by the Canadian industry during 1932 was valued at \$14,734,549, as compared with \$17,047,452 in 1931, a drop of about 14%, according to figures compiled by the Dominion Bureau of Statistics. Production of toilet preparations was valued at \$5,073,134 in 1932, as against \$5,946,292 in 1931, a drop of 15%. Output of polishes and dressings was valued at \$1,823,102 in 1932, as compared with \$1,783,549 in 1931, a gain of 2%.

Further Notes on Industrial Cleansers

Editor, Soap:

Supplementing my article which appeared in the May issue of Soap "The Nature of Industrial Cleansers," an additional word or two would not be amiss as to the types that are commonly known as granite (rough granite) cleansers.

In general, cleansers used for this purpose are acid salts. In some instances the acids themselves are used. There are several points to be borne in mind.

- (1) We have an exceedingly uneven surface to deal with.
- (2) That a uniform contact with the cleaning compound is essential, otherwise an unsightly appearance will result.
- (3) That whatever material is used, it should not leave behind an insoluble salt that it difficult to remove with ordinary water.
- (4) And also great care should be exerted by the operator, that in applying the cleaning agent only the granite comes in contact with it, and not the adjacent bricking or sidewalk.

With all the different types of acids and salts, there is not one that will entirely fill all specifications. There are one or two that come exceedingly close to doing so, and then only in the hands of a trained operator. Percentage strength of solution and time of application contact have a great deal of bearing on the success of these cleansers.

It is true that these acid and acid salts have been used successfully, that their application is quick, merely the applying of cleanser in water solution with brush or sponge, with anywhere from five to ten minutes of contact and then a hosing off with water. But the results will not always be as good as with the time-honored "elbow grease."

Another method in the use of acids or acid salts, a preliminary application of a strong water softener, followed by a thorough scrubbing with a scouring powder with plenty of elbow power has been found to give very

(Turn to Page 45)

Market Report on SOAP AND DISINFECTANT CHEMICALS

(As of June 9, 1933)

NEW YORK—A substantial increase in activity in the soap and disinfectant chemical lines was reported this period, with material continuing to move out to consumers in substantial quantities at a time when most industries are usually showing the start of seasonal contraction in activity. Movement of alkalies was particularly pronounced, the result chiefly of increased production schedules in the textile and glass industries. Price quotations showed little change, but the tone throughout the list was definitely firmer.

ALKALIES

The glass industry continues to absorb large alkali tonnages, due to the stimulus of recent developments in the beverage situation. With the textile and soap industries also active, shipments on contract are holding up well, and consumption compares favorably with the figures for a year ago. Steady demand has had a firming effect on price schedules. Quotations on imported caustic potash have recently been advanced as a result of higher import costs due to movements in foreign exchange.

GLYCERIN

No change in the glycerin price schedule was reported this period, although crude is known to be in much firmer position due to the higher cost of importation and the disposition of sellers to hold out for the higher prices which they believe are coming. A better demand and more interest on the part of buyers in the glycerin market are additional factors.

ROSIN

The rosin price range narrowed this period, with the darker grades going higher and the lighter grades priced lower, due to increased arrivals in the latter divisions. Wood rosin quotations were also advanced. Arrivals are only slightly ahead of 1932 totals in spite of the fact that an increase in production is expected this year. Demand continues to hold up well both from foreign and domestic accounts. The closing schedule this period follows: Gum rosin, grade B, \$4.20; H, \$4.55; K, \$4.75; N, \$4.90; WG, \$4.94; WW, \$5.30; Wood, \$4.33 to \$4.53.

WAXES

Carnauba wax was sharply higher this period, due to increased demand and shortage of supplies. Other items in the wax list were also quoted higher.

National Oil Products Co., Harrison, N. J., put into effect a five-day week with no reduction in pay, starting June 1, the ruling affecting all salaried employees.

Notes on Industrial Cleansers

(From Page 44)

uniform and excellent results. A thorough hosing will remove all the cleaning compound, without any danger of streaking adjacent bricking or sidewalk.

In recommending a procedure for granite cleaning it is good policy to make a survey.

- (1) How badly the granite is discolored or weatherbeaten.
- (2) How deeply is the dirt or discoloration imbedded.
- (3) Is the area of considerable size.

All these points should be considered, recommending in the extreme cases the use of acids or acid salts, at the same time cautioning against their misuse, where, in the milder cases the use of water softener and abrasive.

> L. D. Gibson, Chemist Cunningham Cleanser Corp.

The Outlook in Raw Materials

(From Page 24)

stocks of raw materials than have customarily been carried over the past few years. If, as some insist, small soap makers have already missed their market, it would seem to be the policy of expediency to grab it by the tail before it is away entirely. There may be minor reactions which will be forced to correct too abrupt advances in some quarters, but, on the basis of all past experience, the prevailing trend should be upward.

New Patents

(From Page 41)

mixing means, heating means in the upper part of the main container below the mixing means by which the unconverted portions of the fatty acids are saponified, the residual carbon dioxid is driven out and the excess of water is evaporated, means in the main container below the heating means for adding caustic alkali lye to the reaction mass, means at the upper part of the container for removing the liberated carbon dioxid and water vapor from the container and means at the lower end of the main container for drawing off the soap continually from the container.



Controlled Production:—

We collect, render and refine all of the raw materials used in our stearic acid and red oil. This close control, not available in any other brand, insures high quality products by eliminating low grade raw materials. Let us submit samples and prices. There is no substitute for quality. Use them in your

Dry Cleaning Soaps
Shaving Soaps
Special Cleaners
Polishes
Liquid Soaps

FANCY - EXTRA and SPECIAL
TALLOW
Fatty Acids

Theobald Animal By-Products Refinery

KEARNY, N. J. ESTABLISHED 1914



Market Report on

TALLOW, GREASES AND OILS

(As of June 8, 1933)

NEW YORK—The market for soapmaking fats, oils and greases continued to move forward into higher ground this period, practically every item in the list moving. Gains ranged from ½ to 1½c. pound. One of the unique features of the market action is that coconut oil has as yet been very little affected, price advances being only fractional for this oil. Domestic products have played a much more important part in the general advance. In such a situation one would normally expect that the comparatively low and attractive price of coconut oil would command attention, but up to this point soap makers have refused to get excited about the situation at all. Some of the smaller buyers have acquired stocks, but substantial buying has been conspicuous largely by its absence.

COCONUT OIL

An advance of only 1/8c, per pound was registered in coconut oil this period in the face of much more aggressive upward movements in competing oils and fats. Interest among buyers was not great in spite of the comparatively favorable price. Coast tanks are quoted at 31/8c. to 31/4c. pound, with New York tanks at 31/2c. to 35/8c. pound.

CORN OIL

With competing products and grain going higher this period, corn oil scored an advance of 3/4c. pound, being quoted at 47/8c. pound at the close for mill tanks. Although there was an active inquiry, completed sales were not numerous. The attitude of buyers seems to be to await further developments in the hope of a reaction.

COTTONSEED OIL

With general business sentiment distinctly optimistic, commodities and securities rising on the promise of inflation, and other oils and fats firm, cottonseed oil reflected the general trend by advancing ½c. pound this period, crude tanks being quoted at 4½c. pound and PSY oil at $5\frac{1}{4}$ c.

PALM OIL

The lowered value of the dollar influenced a rise in palm oil prices this period, the spot market being about 4c. pound, an advance of about 3/4c. pound. Due to daily fluctuations in exchange and the consequent uncertainty, sellers were wary about extending their commitments.

TALLOW

Tallow followed the direction of the rest of the fat and oil market by advancing ½c. pound this period. At the advance less business was closed as buyers did not seem particularly anxious to replenish stocks at the higher figure. City extra tallow is quoted currently at $3\frac{7}{8}$ c. pound. The greases also advanced this period, the current quotation on yellow and house grease being $3\frac{1}{2}$ c. pound.

John N. Dallon, New York manager for Wilbur-Ellis Co., is the father of a second child, the arrival this time being a boy, Douglas MacLennan Dallon. Mr. and Mrs. Dallon reside in Brooklyn, N. Y.

Cox, Aspden & Fletcher, essential oils, New York, have removed from 26 to 39 Cortlandt Street.

Palm Oil

(From Page 21)

Eight per cent in 1929 and under 5 per cent in 1931 was taken by the tin-plate industry in the United States. In the United Kingdom and Europe, tin-plate manufacturers likewise employ palm oil for quenching purposes. Aside from its usage as a food and illuminant by the natives of the West African areas of production, local consumption in other sections where palm oil is produced on a commercial scale, i.e., British Malaya and Sumatra is negligible if not entirely non-existent. This is due probably to the fact that the oil palm is not indigenous to those areas and the native populations long accustomed to coconut oil as a primary article of their daily diet have not acquired a taste for palm oil. Abroad, that is in Continental Europe, particularly, some palm oil enters edible channels but the quantity is small as compared with the amount of palm kernel oil so used. Here in the United States only two per cent of the total reported consumption in 1929 was for edible purposes. There was, however, a distinct gain of 14 per cent of the total consumption when comparison is made between such consumption in 1931 and two vears previously.

In the United Kingdom and Europe as well, crude or unrefined palm kernel oil finds employment in soap manufacture, but it has a much larger outlet when refined, in the manufacture of hard vegetable fats of edible nature. Statistics as to our own consumption of this oil show, however, that 80 per cent in 1929 went to the soap kettle, the remaining 20 per cent being taken

(Turn to Page 53)

1933

Terpineol, C. P.

Water White—Fine Odor—One of the Best Low Cost Odors for Soaps, Fly Sprays, Deodorizing Blocks, etc.

Menthol Crystals

Synthetic

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CURRENT PRICE QUOTATIONS

As of June 8, 1933

Minimum Prices are for car lots and large quantities. Price range represents variation in quotations from different suppliers and for varying quantities.

Chemicals			Soda Sal., bbls	1.05	1.15
Acetone, C. P., drumslb. Acid, Boric, bbls., 99½%ton	$08\frac{1}{2}$ 95.00	.10 100.00	Sodium Chloride (Salt)ton Sodium Fluoride, bblslb. Sodium Hydrosulphite, bblslb.	11.40 .07½ .22	14.00 .08½ .26
Cresylic, 97% dk., drums gal. 97-99%, pale, drums gal. Oxalic, bbls. lb.	.37 .42 .11	.40 .45 .11¼	Drums, 60 deg. wks100 lb.	.75	.80 1.65
Adeps Lanae, hydrous, bblslb. Anhydrous, bblslb.	.14 .15	.15 .16	In tanks, 15c. less per hundred, wks. Tar Acid Oils, 15-25%gal. Trisodium Phosphate, bags, bblslb.	.21	.25
Alcohol, Ethýl, U. S. P., bblsgal. Complete Denat., No. 5, drums., ex. gal.	2.45 $.38\frac{1}{2}$	2.59 $.46\frac{1}{4}$	Zinc Oxide, lead freelb.	.03	.0390
Alum. potash lumplb. Ammonia Water, 26°, drums, wkslb. Ammonium Carbonate, tech., bblslb.	.03 .02½ .08	$.03\frac{1}{4}$ $.02\frac{3}{4}$ $.12\frac{1}{2}$	Zinc Stearate, bblslb.	.16	.18
Bleaching Powder, drums100 lb.	1.75	2.35	Oils—Fats—Grease	8	
Borax, pd., cryst., bbls., kegston	50.00	55.00	Castor, No. 1, bblslb. No. 3, bblslb.	.09	.10
Carbon Tetrachloride, car lotslb. L. C. Llb.	.06	$.05\frac{1}{4}$ $.08\frac{1}{2}$	Coconut		
Caustic, see Soda Caustic, Potash Caustic			Ceylon, Coast Tankslb. Cochin, barrels, N. Ylb.	$.03\frac{1}{8}$ $.05\frac{1}{4}$.03 1/4 Nom.
China Clay, fillerton	10.00	25.00	Manila, tanks, N. Ylb.	$.03\frac{1}{2}$.03 %
Cresote Oil tanksgal.	$.09$ $.11\frac{1}{2}$	$.10 \\ .12\frac{1}{2}$	Tanks, Pacific Coastlb. Cod, Newfoundland, bbls. gal.	.031/8	.03 1/4
Feldsparton	14.00	15.50	Copra, bulk, Coastlb.	.0170	.0180
(200 to 325 mesh) Formaldehyde, bbls lb.	.06	.07	Corn, tanks, millslb.	.04 3/4	.04 %
Fullers Earthton	15.00	24.00	Bbls, N. Y	.06 1/2	Nom.
Glycerine, C. P., drumslb. Dynamite, drumslb.	$.10\frac{1}{4}$ $.08\frac{1}{4}$	$.10\frac{1}{2}$ $.09$	Cottonseed, crude, tanks, milllb. PSYlb.	.041/4	$.04\frac{1}{2}$ $.05\frac{1}{4}$
Saponification, drums	$.05$ $.04\frac{1}{2}$	$.05\frac{1}{2}$	Degras, Amer., bblslb. English, bblslb.	$.02\frac{1}{2}$ $.03\frac{3}{4}$.03 1/4
Soaps, Lye, drums lb. Hexalin, drumslb.	.0472	.05	German, bblslb.	.03 1/4	$.04$ $.03\frac{3}{4}$
Kieselguhr, bagston	_	35.00	Neutral, bbls	.07%	.08 1/2
Lanolin, see Adeps Lanae.	4 50	0.00	Greases, choice white, bbls., N. Ylb. Yellowlb.	$.03\frac{3}{4}$ $.03\frac{1}{2}$.04
Lime, live, bbls. per bbl. Mercury Bichloride, kegslb.	1.70 .93	2.20 1.08	House lb.	.03 1/2	.03 %
Naphthalene, ref. flakes, bblslb.	.04 3/4	.06	Lard, prime, steam, tierceslb. Compound tierceslb.	$.06\frac{3}{4}$ $.07\frac{1}{2}$.06 %
Nitrobenzene (Myrbane) drumslb.	.09 1/2	.11	Lard Oil,		
Paradichlorbenzene, bbls., kegslb. Paraformaldehyde, kegslb.	.15 .38	.23 .39	Extra, bbls	_	$.08$ $.07\frac{3}{4}$
Petrolatum, bbls. (as to color)lb.	.01 %	.06 3/4	No. 2, bblslb.		.071/4
Phenol, (Carbolic Acid), drumslb. Pine Oil, bblsgal.	$.14\frac{1}{4}$ $.59$.16 .65	Linseed, raw, bbls., spot lb.	.0900	.0940
Potash, Caustic, drumslb.	$.06\frac{1}{8}$.071/8	Tanks, rawlb. Boiled, 5 bbls. lotslb.	_	.0840 $.1020$
Flakelb. Potassium Bichromate, caskslb.	.07	$.08\frac{5}{8}$ $.08\frac{1}{2}$	Menhaden, Crude, tanks, Baltgal.	.15	Nom.
Pumice Stone, powd100 lb.	2.50	4.00	Oleo Oil, No. 1, bbls., N. Ylb. No. 2, bbls., N. Ylb.	_	$06\frac{5}{8}$ $06\frac{1}{8}$
Rosins (600 lb. bbls. gross for net)-	4.00	4 55	Olive, denatured, bbls., N. Ygal.	.63	.65
Grade B to H, basis 280 lbsbbl. Grade K to Nbbl.	$\frac{4.20}{4.75}$	$4.55 \\ 4.90$	Foots, bbls., N. Ylb.	.05 1/4	.05%
Grade WG and WWbbl.	$4.95 \\ 4.33$	5.30 4.53	Palmlb. Palm Kernel, casks, denaturedlb.	.043/4	.04 1/8 Nom.
Woodbbl. Rotten Stone, pwd. bblslb.	.021/2	.041/2	Peanut, domestic tankslb.	.04 3/4	Nom.
Silica, Ref., floatedton	18.00	22.00	Red Oil, distilled, bblslb. Saponified, bblslb.	$.06\frac{3}{4}$ $.06\frac{3}{4}$	$.07\frac{\%}{8}$ $.07\frac{\%}{8}$
Soap, Mottledlb.	$.03\frac{1}{2}$.04 .12	Tankslb.	-00 74	.05 3/4
Olive Castile, barslb.	.09 .17	.22	Soya Bean, domestic tanks, N. Ylb.		.06
Olive Oil Footlb. Powdered White, U. S. Plb.	$.04\frac{1}{2}$ $.10$.06 .12	Stearic Acid Double pressedlb.	.09	.091/2
Green, U. S. P.	.06	.08	Triple pressed, bgslb.	.113/4	$.12\frac{1}{4}$
Tallow Chipslb. Whale Oil, bblslb.	.05 .04	$.06$ $.04\frac{1}{2}$	Stearine, oleo, bblslb.	.05 1/2	.05 %
Soda Ash, contract, wks., bags, bbls.			Tallow, special, f. o. b. plantlb. City, ex. loose, f. o. b. plantlb.	_	$03\frac{3}{8}$
Car lots, in bulk	1.17½	$\frac{1.43}{1.05}$	Tallow, oils, acidless, tanks, N. Ylb.	-	.07
Soda Caustic, Cont., wks., sld100 lb.		2.55 2.95	Bbls., c/1, N. Y	.031/2	$.07\frac{1}{2}$ $.04$
Flakelb. Liquid, tankslb.	2.15	2.20	refinedlb.	.06 %	.06 %

The "Par" filling record

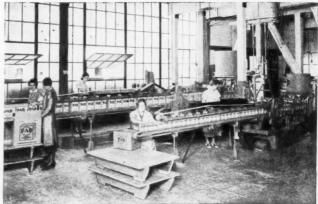
AT the plant of Gordon-Allen Ltd., Oakland, California, two S & S Automatic Carton Filling and Sealing Machines are used to Package "Par", a well-known soap powder. Many packaging experts believe these machines are doing a distinguished job. One fills and seals an 8-oz. package of "Par" at the rate of sixty cartons per minute. The other fills and seals a 2-lb., 8-oz. carton at the surprising rate of fifty-four packages per minute!

Despite their uncanny speed, neither of these machines

allows avariation in weight of more than ½ oz. and every carton is cleanly filled, without spillage and needless waste. From feeding to sealing the operation is entirely automatic.

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		As of J	une 8, 1933			
Essential Oils			Aromatic Chemicals			
Almond, Bitter, U. S. Plb.	\$2.25	\$2.50	Acetophenone, C. P lb.	\$1.50	\$2.25	
Bitter, F. F. P. Alb. Sweet, canslb.	$\frac{2.50}{.47}$	$\frac{2.75}{.50}$	Amyl Cinnamic Aldehydelb.	3.50	4.25	
Anise, cans, U. S. Plb.	.35	.37	Anethollb.	.90	1.00	
Apricot, Kernel, canslb.	.20	.22	Benzaldehyde, techlb.	.60	.65	
Bay, tins	1.30	1.70	U. S. P	1.10	1.30	
Bergamot, copperslb.	1.15	1.40	Benzyl, Acetatelb. Alcohollb.	.55 .70	.95 1.15	
Artificiallb.	1.05	1.15	Citrallb.	1.75	2.40	
Birch Tar, rect., tinslb. Crude, tinslb.	.45 .12	.50 .13	Citronellallb.	2.25	2.50	
Bois de Rose, Brazilianlb.	1.00	1.10	Citronellyl Acetatelb.	2.25 4.50	3.00 7.00	
Cayennelb.	2.10	2.15	Coumarinlb.	3.10	3.30	
Cade, canslb.	.27	.30	Cymene, drums gal.	.90	1.25	
Cajuput, native, tinslb.	.48	.55	Diphenyl oxide lb. Eucalyptol, U. S. P lb.	1.05 .55	1.20	
Calamus, tinslb.	2.75	3.25	Eugenol, U. S. Plb.	2.00	2.50	
Camphor, Sassy, drumslb.	.10	.12	Geraniol, Domesticlb.	1.25	2.00	
White, drumslb.	.12	.14	Importedlb. Geranyl Acetatelb.	2.00 2.50	$\frac{3.00}{4.00}$	
Cananga, native, tinslb. Rectified, tinslb.	$\frac{1.50}{2.00}$	$\frac{1.70}{2.25}$	Heliotropinlb.	1.75	2.00	
Caraway Seedlb.	1.40	1.45	Hydroxycitronellallb.	3.50	9.00	
Cassia, Redistilled, U. S. Plb.	.95	1.00	Indol, C. Poz. Iononelb.	2.00 3.60	2.50 6.50	
drumslb.	_	.90	Iso-Eugenollb.	2.90	4.00	
Cedar Leaf, tinslb.	.62	.65	Linaloollb. Linalyl Acetatelb.	1.65 2.10	$\frac{2.00}{3.50}$	
Cedar Wood, light, drumslb.	.24	.27	Menthollb.	3.00	3.10	
Citronella, Java, drumslb. Citronella, Ceylon, drumslb.	.42	.44	Methyl Acetophenonelb. Anthranilatelb.	2.50 2.10	3.00 2.25	
Cloves, U. S. P., canslb.	.70	.35	Paracresollb.	4.50	6.00	
Eucalyptus, Austl., U. S. P., canslb.	.22	.23	Salicylate, U. S. P lb. Musk Ambrette lb.	.40 5.75	.45 6.00	
Fennel, U. S. P., tinslb.	.95	1.00	Ketonelb.	5.50	6.50	
Geranium, African, canslb.	4.25	5.25	Moskenelb. Xylenelb.	$\frac{5.00}{2.00}$	$6.00 \\ 2.50$	
Bourbon, tinslb. Hemlock, tinslb.	4.25	4.75	Phenylacetaldehydelb.	4.00	6.50	
Lavender, U. S. P., tinslb.	1.30	.70 3.50	Phenylacetic Acid, 1 lb., botlb.	3.00	4.00	
Spike, Spanish, canslb.	.48	.50	Phenylethyl Alcohol, 1 lb. bot. lb.	4.25	4.50	
Lemon, Ital., U. S. P	.80	1.10	Rhodinol	.20	9.50	
Lemongrass, native canslb.	.45	.55	Terpineol, C. P., 1,000 lb. drslb.	.27	.29	
Linaloe, Mex., caseslb.	1.15	1.45	Canslb.	.31	.32	
Neroli, Artificiallb.	10.00	20.00	Terpinyl Acetate, 25 lb. canslb. Thymol, U. S. Plb.	.75 1.25	.90 1.35	
Nutmeg, U. S. P., tinslb. Orange, Sweet, W. Ind., tinslb.	.90 1.10	.95 1.15	Vanillin, U. S. Plb.	4.50	5.75	
Italian coplb.	.90	1.30	Yara Yaralb.	1.30	2.00	
Distilledlb.	.40	.45	Insect powder, bblslb. Concentrated Extract	.17	.21	
Origanum, cans, techlb. Patchoulilb.	.25 3.00	.50	5 to 1gal.	1.30	1.60	
Pennyroyal, dom lb.	1.70	3.50 1.80	15 to 1gal. 20 to 1gal.	3.35 5.20	3.75 5.40	
Importedlb.	1.20	1.30	30 to 1gal.	7.25	7.50	
Peppermint, nat., caseslb. Redis., U. S. P., caseslb.	$\frac{2.40}{2.65}$	$\frac{2.50}{2.75}$	Gums-			
Petit Grain, S. A. tinslb.	1.00	1.05	Arabic, Amb. Stslb. White, powderedlb.	$.06$ $.09\frac{1}{2}$.06½ .13	
Pine Needle, Siberianlb.	.70	.75	Karaya, powdered No. 1lb.	.09	.12	
Rose, Naturaloz.	6.00	15.00	Tragacanth, Aleppo, No. 1lb. Sortslb.	.65 .07	.70	
Rosemary, U. S. P., tinslb.	2.00	2.75		.01	.00	
Tech., lb. tinslb.	.22	.25	Waxes— Bayberry, bgs lb.	.14	.15	
Sandalwood, E. Ind., U. S. Plb.	5.00	5.75	Bees, whitelb.	.30	.33	
Sassafras, U. S. P	.60	.90	African, bgslb. Refined, yellb.	.15 .18	$.15\frac{1}{2}$ $.22$	
Artificial	.17 1.25	.19 1.30	Candelilla, bgslb.	.09 1/2	.10	
Thyme, red, U. S. P	.50	.70	Carnauba, No. 1lb.	.26	.28	
White, U. S. Plb.	.60	.80	No. 2, Yel. lb.	.25	.26	
Vetivert Pourhon 1h	1 25	4.50	No. 3, Chalkylb.	$.12\frac{1}{2}$.13	

Ylang Ylang, Bourbon.....lb.

е

 $\frac{4.50}{20.00}$

5.50

3.50

.06

.041/4

.05 3/4

.03%

No. 3, Chalky.....lb.

Japan, caseslb.

Paraffin, ref. 125-130 .. lb.

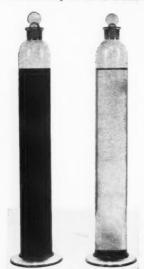
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Both tubes contained e q u a amounts of purwater and black manganese diox ide. Left ham tube contained, 025% P. Q. Si licate. Twenty four hours after shaking

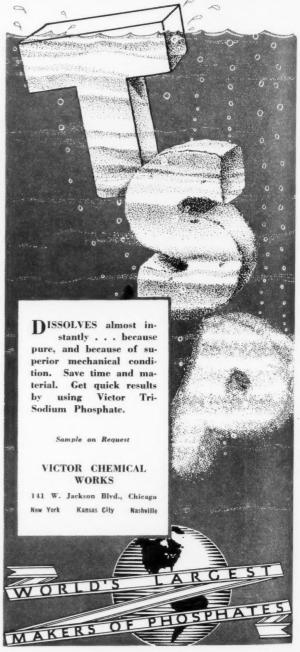
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Palm Oil

(Continued from Page 47)

by confectionery and fancy biscuit manufacturers. In 1931, in contrast with the 80 per cent figure of two years previously, 58 per cent became an ingredient in soaps whereas, on the other hand, requirements of the confectionery and fancy biscuit trades accounted for nearly all the remainder.

Except for those sections where natives are the dominant factor in the industry, hydraulic expression is in more general vogue than other methods for the separation of the oil from the pericarp of the palm fruit which is the source of the palm oil of commerce. An exception should be noted in the case of British Malaya where twelve of the thirteen mills in operation are equipped with the centrifuge process for oil extraction. The manufacture of palm oil is confined to the immediate area of fruit production while the kernels, on the other hand, are shipped to large crushing centers such as Hull, Hamburg and Rotterdam and in more recent years to a lesser extent to the United States and other countries. Palm kernels are subjected to the expeller and hydraulic methods of treatment in the United States but abroad either hydraulic expression or solvent extraction are more commonly employed.

F ORMERLY palm oil was packaged exclusively but the high cost of barrels, drums and similar containers which shippers were obliged to import was responsible in the main for the installation of bulk loading and

shipping facilities at the larger shipping points. Apart from the elimination of the item of package expense, a considerable economy is effected by the buyer if he can handle his palm oil in bulk. Up to the present time, storage tanks, pumps and other essential auxiliary equipment are available for the reception of bulk oil at Matadi in Angola, a river port on the Congo; at Lagos, the shipping center for the heavy export volume of oil moving from the interior of Nigeria and neighboring countries; at Belawan-Deli in Sumatra where limited tankage had been provided and, quite recently, at Singapore to facilitate the storage of oil arriving by barge from points in the interior and awaiting the steamer to carry it to Belawan-Deli for transshipment. The quantity of Malayan oil-available at any one time is as yet too small to justify ocean-going vessels equipped with deep tanks calling in at Singapore. The time is probably not far distant when the sea-going traffic in palm oil will be largely bulk cargoes even if it still should be necessary because of inadequate internal means of transportation in some areas of production to make deliveries at ports in packages.

One steamship line with a regularly scheduled service between West African ports and the United States two years ago had in operation 14 vessels equipped with deep tanks with a total tankage capacity of 9,000 tons and three additional vessels building at that time. This fleet of 17 vessels plus five more steamers which it was contemplated fitting with tanks, brought the total tankage capacity up to 16,000 tons.

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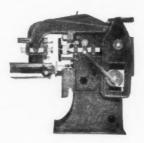
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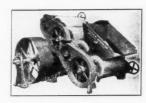
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Oil-Fat-Soap PRODUCTION SECTION

A section of SOAP devoted to the technology of oils, fats, and soaps published prior to Jan. 1, 1932, as a separate magazine under the title, Oil & Fat Industries.

Lecithin in Toilet Soaps

L ECITHIN has been largely used in the manufacture of skin creams and other cosmetics and toilet articles. It has a very beneficial action on the skin. It is, therefore, somewhat surprising that it has not found greater use in the manufacture of fine, milled toilet soaps. It has been claimed that it improves the soap materially in giving to it certain skin-improving and skin-protecting qualities. Furthermore, it does not interfere in any way with the detergent action of the soap or with its lathering power. On the contrary, inasmuch as lecithin possesses colloidal properties, it actually aids the cleansing action.

The conditions under which a lecithin soap must be made so that the properties of this substance are not lost are described by Josef Augustin in Seifensieder Zeitung, 1933, pages 130 to 131. He points out first that the lecithin must not be incorporated with the soap during the boiling process or cold saponification, because the reagents and the temperature will destroy the substance. Lecithin may undergo a sort of saponification on coming in contact with lyes. The saponified lecithin no longer possesses the characteristics of the original substance, any more than does soap the properties of the original fats and oils used in the soap making process.

The safest way to compound the lecithin with the soap is to add it to the finished soap. Hence it is kneaded into a creamy soap or milled with a solid soap. Thus lecithin "superfats" the soap to a certain degree. However, another difficulty arises in this process. Lecithin, both of animal and vegetable origin. contains 40 to 60 per cent of oil. This oil, which is an unsaponified fatty acid glyceride, may cause rancidity even in the best-made soap. Hence, when five per cent of lecithin is milled with the soap, it means that the latter then contains two to three per cent of free vegetable oil. The quantity is, therefore, far beyond what is commonly considered as the maximum

allowable unsaponified fat content in soap, namely less than 0.1 per cent. Furthermore, in the case of vegetable lecithin, the product is generally made from soya bear oil and hence contains certain proportions of the free oil, which is somewhat more subject to oxidation than free olive oil. Hence, the soap will spoil more quickly.

Hence, the lecithin, which is used in making lecithin soaps, must be free from oil. Such lecithin, moreover, must be used immediately after the oil has been removed, because the oil in lecithin protects it from the action of the oxygen in the atmosphere. Lecithin, free from oil, has an extraordinary capacity for absorbing oxygen. Furthermore, it has been found that an oil-free preparation, from which the oil has been removed by a mechanical process, is not stable, but becomes rancid and decomposes. It should be remembered that oxidized lecithin no longer possesses the properties of the original lecithin, any more than does saponified lecithin.

The oil that is held mechanically in lecithin can be saponified. However, the process must be carried out in such a manner that the chemically-combined fatty acids which constitute lecithin along with glycerinophosphoric acid and cholin, are not affected in any manner. It is impossible to state definitely that any particular lot of lecithin will be resistant to the action of alkalies, because it has been found that the quality and behavior of the lecithin will vary, even though its origin may be the same, as in the case of soya-bean lecithin. The requirement is that the lecithin should remain unsaponified during the time that it takes to saponify the oil that is mechanically combined with it. This is, however, an uncertain matter at all times because there are no exact investigations published in the literature on the degree to which lecithin tends to be saponified as compared with the oil. The unsaponified lecithin must later be separated from the saponified oil by extraction, because soya-bean oil soap is not a welcome ingredient of fine toilet soaps.

Lecithin, which has been mixed with an undecomposable, salve-like or liquid fat directly after the oil has been removed, does not decompose and is suitable for making milled soaps. White petroleum, white oil and particularly best quality wool grease (lanolin) are suitable for this purpose. Five per cent of lecithin prepared in this manner can be milled with the soap without any trouble. The combination of lecithin and lanolin must be considered as the most natural mixture, because lecithin and cholesterin are found associated together in all organs. The emulsifying or degreasing action of lecithin, which is too strong for many skins, is diminished by the presence of lanolin. It is also possible to make lecithin, which has been treated to remove its oil content, stable in storage by immediately mixing it with soap and a preservative, especially an antoxidant.

It appears that lecithin has a preservative action on soap and also soap on lecithin. A sample of soap which has been milled with five per cent oil-containing lecithin and which was preserved with 0.2 per cent of methylhydroxybenzoate and 0.1 per cent of hexamethylenetetramine, did not show any appreciable signs of rancidity after being kept for a year and a half. The cakes of soap were used several times and then dried, thus being subjected to repeated drying and wetting which facilitate rancidity. It must, however, not be assumed that so dangerous an oil as soya-bean oil, would be preserved in soap by the use of preservatives alone. The lecithin must also be responsible for a part of the preservative action.

Good results should be expected by incorporated sodium thiosulfate (hyposulfite) with the lecithin soap. It is, however, best practice to remove the oil from the vegetable lecithin and thus eliminate a very uncertain quantity. Then the lecithin soap may be safely prepared with de-oiled lecithin mixed with protective, undecomposable fats. Nevertheless, in such cases where the oil has not been sufficiently removed from the lecithin, the latter may be preserved by means of the aforementioned preservatives. It is furthermore advisable to keep the protected lecithin in well-closed brown-colored glass jars.

The sulfonation products obtained from fats and oils dissolved in diluents, which are insoluble in water, are separated by the addition of an excess of an aqueous solution of alkali and allowing to stand for some time. For example a solution of castor oil and ricinoleic acid in ethylene trichloride is sulfonated with fuming sulfuric acid in the presence of sodium chloride. The mixture is poured into ice and treated with more sodium hydroxide than is required for neutralization. The sulfonation products form a separate layer on standing over night. Firma Louis Blumer. German Patent No. 557,548, filed June 26, 1928.

Mechanism of Detergency

One part of the detergent molecule dissolves in the hydrocarbon impurities which contaminate the textile fiber, while the other part dissolves in water, so that the detergent acts as a linkage between the hydrocarbon (fats, greases, etc.) and the water and thus enables the fatty substance to be removed. Detergents of this type are principally soaps. More precise methods of measuring actual detergent powers of soap are present day requirements. Both wetting power and emulsifying power of the detergent must be determined. Present methods are still not entirely satisfactory, particularly the determination of the emulsifying power of a detergent by its cleansing action on artificial soiled fabric. Emulsifying agents play two parts in the detergent action. First they permit easy dispersion owing to a reduced interfacial tension and second, they promote stability after their absorption, assuming the absence of disturbing factors, such as chemical change or such physico-chemical alteration as leads to desolvation. Adsorption and lathering properties of soaps are also important as well as their resistance to the hardness salts of water. As far as the addition of alkali to soap to increase its detergency is concerned, it can be said that best results from a detergent point of view are obtained when a certain definite concentration of hydrogen ion is present in the detergent solution, no matter what alkali is used. The assumption that the detergent power rises parallel with the decrease in surface tension of the soap solution as produced by the addition of alkalies or other substances is not necessarily correct. Addition of alkali does not always increase the detergent powers, as in the case of borax, which actually decreases them; nevertheless it is not absolutely useless as a washing agent for under certain conditions it adds to the effectiveness of other alkalies when incorporated with a soap. P. L. Mann. American Dyestuff Reporter, 1933, volume 22, pages 297 to 298.

Method for Fatty Acids in Soap

A special extraction apparatus is used for the analysis. Very small quantities of fatty acids can be extracted from liquids with its aid. The soap is decomposed in this apparatus. The fatty acids are washed with a little alcohol (50cc.) into a conductivity vessel, where the soludioxide. Alcohol concentration must not be less than 75 per cent. The alcohol used must be free from acids. aldehydes and carbon dioxide. Half to one cc. of tenth normal hydrochloric acid is added and the solution is titrated with 0.104 normal methanol solution of sodium hydroxide. A titration curve is obtained from the values read off the galvanometer after every addition of reagent whereat the conductivity of the solution is determined. The curves are used to calculate accurately the fatty acid content of the soap, even though present in extremely small quantities. G. Jander and K. F. Weitendorf, Angewandte Chemie, 1932, number 45. pages 705ff.

Criticizes Fat-Chemistry Methods

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Although considerable work has been done within recent years on the chemistry of fats and oils, the investigator in this field, according to Dr. G. S. Jamieson, head of the Oil, Fat and Wax Laboratory of the United States Department of Agriculture in an address recently delivered before the Toronto and Hamilton Chemical Associations at the University of Toronto, Canada, is still handicapped by lack of accurate methods. The difficulty of isolating or determining the individual glycerides present is any naturally occurring fat or oil was cited. Attention was called to the work done by McNair on the relation between the grouping of the botanist and zoologist and the character of fats from individuals of the group. Petroleum ether is claimed to give the best results of all solvents in preparing the sample, because it extracts smaller quantities of the non-oil constituents. Samples should always be separated entirely from insoluble foreign matter and moisture. Various methods, which have been proposed and are now being used for the determination of the various physical constants of fats and oils, such as acetyl number, iodine number, etc., were critically discussed. The separation and determination of saturated and unsaturated acids by the lead-salt ether method, the Twitchell lead salt alcohol method and the Bertram oxidation method were discussed and the aforementioned methods were said to have been found most useful. Canadian Chemistry and Metallurgy, 1933, 75.

Cleansing and Scouring Preparations

The quest for the newer detergents goes on. patent literature is always replete with new processes and products in this field. An interesting process and product is described in German Patent No. 556,257, which is assigned to the I. G. Farbenindustrie A. G., which has been more active along these lines than any other chemical enterprise. The new scouring agents, detergents, emulsifiers and wetting agents are made by the sulfonation of a very crude and cheap raw material. that is lignite tar oil hydrocarbons in admixture with at least 50 per cent of aromatic or hydroaromatic hydrocarbons or their derivatives. The magnesium salts of these hydrocarbon-sulfonic acids are not hydroscopic, differing therein from the sodium salts or the free acids themselves. This is a very important technical advantage. The magnesium salts are advisably mixed with mineral salts, such as sodium sulfate or ammonium sulfate or with protective colloids to avoid the product becoming turbid. Thus the sulfonic acids obtained from 100 parts of solar oil and 50 parts of xylene are converted into the lime salt and the lime salt is converted into the magnesium salt by treatment with magnesium sulfate. A yield of 190 parts of the magnesium salt is obtained. Fifty parts of the magnesium salt is mixed in a ball mill with 50 parts of sodium sulfate. The product can be then diluted with considerable water without becoming turbid.

Booklet on Soap Making Processes

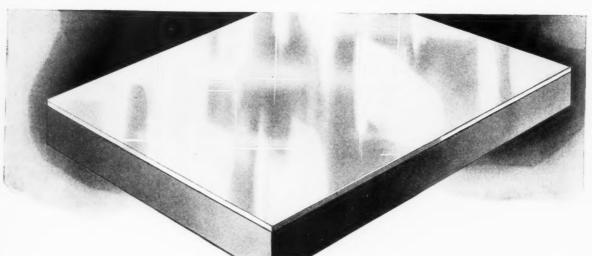
Various patents, issued in the United States, France, England, Austria, Switzerland and Germany, are used as source of material by Dr. A. van der Werth in preparing his booklet on special processes for the manuseven sections as follows:—preparation of the stock, special saponification with alkali hydroxides, saponification with other reagents, continuous saponification processes, manufacture of potash soaps, further processing of soap and manufacture of rosin soap. A large number of patents are briefly described under these headings, and an index of the patents in numerical order is given in an appendix, making it easy to locate them in the facture of soap. The author separates the booklet into text. The booklet is 56 pages and is published in German.

Colloid Chemistry of Soaps

While there have been various monographs and pamphlets published on certain phases of the colloid chemistry of soaps, no comprehensive treatise on the entire subject has been available until the work by Dr. E. L. Lederer, written in German under the above title. This book is concerned with both the theoretical and practical sides of colloid chemistry of soaps. Thus many technical problems of soap making are discussed from this standpoint. The author deals in fact with every phase of his broad theme. The properties of pure soaps are discussed, that is soap crystals, soap gels and soap sols. There is a comprehensive discussion of the behavior of soaps in the presence of electrolytes and nonelectrolytes. The detergent action of soaps also received attention. The colloid chemistry of technical saponification and soap making includes neutralization of fatty acids by alkalies and by alkali carbonates, saponification of neutral glycerides by the cold, semi-boil and boil processes, salting-out curd soaps, making semi-solid soaps, soft soaps, metallic soaps. The final chapter of the book is concerned with soap-like substances, such as derivatives of chain-group fatty acids, ring-constituted acids, fatty bases and other substances. Published by Verlag von Theodor Steinkopff, Dresden.

Commercial fish oils fall into three classes, namely, the gadidae family, the elasmo branch fish and a few miscellaneous fish. The first two classes are distinguished from the third by the fact that their liver oils may be readily extracted by heating with water. Analytical characteristics of the various oils were determined, particularly the content of unsaponifiable matter, to establish how closely analytical differences agree with the zoological classification. Methods are described. Iodine values of the unsaponifiable matter were found to be definitely higher for the gadidae family than any other oils except shark liver oils containing a high proportion of squalene. The oils of fish of this family resemble each other closely. Normal Evers and Wilfred Smith. Analyst, 1932, volume 57, page 25.

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Color and Purification of Niger

The color of the niger may be ascribed in the following factors: oxidized fatty acids, metallic compounds and metallic soaps, coloring matters, dust and dirt. The color of curd soap and niger and the proportion of oxy-fatty acids in both products for a series of soaps made from hard fats were determined. Some of the results obtained were as follows.

	Fa		Oxidized			
Nature	of soap	from	Red	Yellow	Blue	acid
Hardened	cottonseed oil	Curd	0.69	1.50	0	0.29
		Niger		1.90	0	0.40
Hardened	fish oil	Curd	0.94	2.50	0	1.17
		Niger	2.20	3.70	0.64	11.48
Hardened	tish oil	Curd Niger	20.00 21.5	$\frac{20.00}{21.0}$	16.0	$\frac{2.42}{51.56}$

The colorimetric tests were made with the aid of a Lovibond tintometer. It can be seen from the above tabulation that the higher the content of oxidized fatty acids in the niger, the deeper its color.

It was also established through the addition of various proportions of ferrous and ferric salts, that the dark color of the niger is related to the presence of ferro-ferric compounds, and that the soap undergoes bleaching when exposed to the air. Experiments proved that the black color was caused by the presence of ferro-ferric compounds of the type, FeO.Fe₂O₃.nH₂O and that green color effects were obtained with compounds like (FeO)₂Fe₂O₃.nH₂O.

Dust and other mechanical impurities are not the sole cause of the color of the niger, as was proved by comparing the color after filtering. The aforementioned iron compounds are also partially removed by filtration. Filtration alone lightened the color by about 19.5 to 36.8 per cent in various tests, and at the same time the iron content of the niger was reduced for example from 0.465 per cent to 0.251 per cent.

Four methods are available for purifying the niger, namely bleaching with oxidizing agents, bleaching with reducing agents, filtration and salting out the niger. Decolorization can be effected with 42.8 per cent of sodium hypochlorite, 46.8 per cent of sodium persulfate, 41.3 per cent of sodium perborate. Ordinary filtration results in 38.6 per cent decolorization. Salting-out the niger reduces the coloration about 67.2 per cent. Hence the combination of filtration and salting-out gives far better results than chemical treatment. Furthermore, the chemically bleached soaps tend to darken, while the decolorization effected by filtering and salting-out is permanent. Syozi Igarashi, Journal of the Society of Chemical Industry of Japan, 1933, 19B.

Grape Seed Oil

A detailed study of the chemical and physical properties of the oil as well as methods of obtaining it resulted in the following conclusions. The oil, which is obtained by pressing, is of better quality than that obtained by extraction with solvents. The acidity of the oil varies with the age and conditions under which the seeds are stored. Fresh seeds are only very slightly acid. If fermentation takes place or if a mold is formed,

Sterilized seeds can be stored the acidity increases. better and the oil content and acidity can be kept constant under such conditions. Sterilization or distillation has the additional advantage of removing the moisture contained in the seeds, converting them into an easilyground condition with the result that the oil is extracted from them in the shortest possible time. If it is impossible to extract the seeds immediately, then the previously well-dried seeds must be kept dry. Grape seed oil can be very easily saponified in the cold. Since the iodine number of the oil is quite high, it can be used for the manufacture of varnishes, stand oils, blown oils and generally in the paint and varnish industry. Due to its high hydroxyl number and the low solidification point, the oil, after being properly processed, can be used as a lubricant. Neither the saponification number nor the iodine number indicates the presence of erucic acid. The investigation was carried out on a Roumanian oil. A bigliography is appended. Dr. C. Otin and M. Dima. Allgemeine Ole und Fett Zeitung, 1933, numbers 2 and 3.

Problems in Candle Making

In making paraffin candles it is often necessary to add substances to prevent mottling and sticking. Most common anti-mottling agent is carnauba wax. Lead stearate, montan wax and its products are also used. Mottling is also prevented by the removal of the dissolved air by means of steam just before filling. Small quantities of suitable quality stearin prevent mottle and assist molding, but stearin containing iso-oleic acid is useless for this purpose. In the case of sticky waxes, oil may be added and for this purpose coconut oil is useful, but it may produce mottle. Anti-mottling agents, like lead stearate, cause stickiness and difficulty of ejection. Candles are now being made from a stearin obtained from hydrogenated Japanese fish oil, also from hydrogenated sperm oil. The latter is used as a substitute for paraffin in Japan for making candles but does not give the same opacity or stability to a mixed candle as does ordinary stearin. Candles are being made by a method wherein the wax coating is built up continuously by passing through a bath and dies until the required thickness is obtained. The candles are tipped by a machine and are also given some polish. David Allan. The Chemical Age (London), 1933, page 139.

Ethyleneglycol mono-ethyl ether is used alone or in admixture with petrolatum oil for the determination of the critical solution temperature of certain fats. Due to its high solvent power, the separation occurs at such a temperature that the fat partially solidifies. A mixture of this solvent, petrolatum oil and fat is homogeneous when hot and begins to separate at a definite "temperature of desolubilization." This may be used to detect adulteration of cow's butter or cocoa butter with coconut oil, of castor oil with other vegetable oils and of linseed oil with fish oil. E. Jaffe. Annali Chimica Applicata, volume 22, pages 667 to 673.

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Soap from Sperm Oil

A suitable stock for the manufacture of soap is obtained from sperm oil by subjecting to catalytic hydro-The hardened product is saponified with excess alkali at high temperatures, above 250 degrees C. Thus, for example, 1000 parts of sperm oil are hydrogenated until the iodine value of the oil is about zero and the titer 50 degrees. The solidified product is separated from the catalyst and then mixed with 180 to 200 parts of solid caustic soda. The mixture is heated in a closed kettle to 250 to 280 degrees C. The hydrogen gas, which is set free during the course of this process, is blown out of the kettle from time to time and may be reused. After heating for two hours, the mass is transferred to a soap kettle, containing 1000 parts of weak brine, where the soap is fitted, salted-out and worked up into a curd soap in the usual manner. The product, which is obtained, may be worked up into a laundry soap or even a toilet soap. Good grades of soft soap can be produced by using potassium hydroxide in the place of sodium hydroxide. The soap may be treated in the autoclave and then passed over a cooling drum, dried, and formed into flakes or powder. Deutsche Hydrierwerke A. G., Berlin, Germany. German Patent No. 538,388.

Sulfonating Castor Oil

Castor oil is sulfonated at a temperature not exceeding 40 degrees C. Refrigeration may be required to prevent undue rise of temperature. The sulfuric acid esters of castor oil fatty acids are thus formed predominately. By heating to higher temperature, for example about 60 degrees C, these products are converted into polymerized substances, which have the special property of mixing with substantially large quantities of mineral oil or fatty oils. These products are not obtained by the ordinary sulfonation process. In an example 100 kgs. of castor oil are sulfonated with 20 kgs. of concentrated sulfuric acid without cooling. After all the acid has been added, the mixture is heated to about 60 degrees C: the product is washed in the usual manner and neutralized by the addition of alkali. Ammonia may also be used for this purpose. Roehm and Haas A.G., Darmstadt, Germany. German Patent No. 549.031, filed October 24, 1929.

Esters of high viscosity are prepared from castor oil by partially hydrolyzing the oil. The product, which has an acid value of 80 to 120, is washed to remove glycerin and heated in a vacuum to about 250 degrees C with or without a catalyst. In this way esterification of the hydroxy-glycerides is effected with the free hydroxy acids. Raw castor oil is added, if required, in order to reduce the acid value of the product to less than six. The product has a high density and index of refraction and can be mixed with mineral oils. C. R. del Turco. British Patent No. 385.021, filed August 27, 1931.

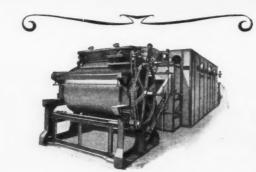
Glycerin in Glycerin Soaps

Glycerin in glycerin soaps is determined colorimetrically by a new method which avoids the difficulties of the dichromate method, occasioned by the fact that sugar, alcohol, dextrin and other substances, which are oxidized by chromic acid, may also be present in the soap. Under such conditions the glycerin content of the soap must be determined by the acetin method or by direct weighing. In the new colorimetric method which is much simpler and easier to carry out, the liquid used for comparing the color is Schiff's reagent, that is a solution of 1/40 per cent fuchsin in water, into which sulfur dioxide has been passed until only a faint pinkish color persists. It is not necessary to remove the sugar content of the soap before testing, but it is essential that alcohol and dextrin should not be present. Dextrin should be precipitated with hot alcohol and the alcohol should be evaporated. Formaldehyde and honey naturally disturb the reaction. The absence of invert sugar must therefore be ascertained. Dingemans. Chemisch Weekblad, through Die Seifen, Oel und Fettindustrie, 1933. page 119.

Oil Extraction Process

Light colored, acid-free fats and oils are obtained from animal matter by first subjecting the raw materials to pretreatment with anhydrous acetone and then extracting the oil in the usual manner by means of acetone, used as solvent or extraction medium. The acetone used in the pretreatment of the raw materials must be as anhydrous as possible, containing not more than two per cent water. For example 100 kilograms of comminuted fish, flesh or waste materials are mixed with 200 kilograms of anhydrous acetone and the entire mass is heated to approximately 50 degrees C. The water in the raw materials is almost entirely removed by this pretreatment. At the same time, small quantities of fatty acids combined with lecithin, most of the salt in the raw material, the fatty acids and the coloring matter are also removed. The acetone solution is separated from the solid residue by filtering and the aqueous acetone is distilled and the solvent recovered, while a slime containing fatty acids, lecithin, water and salt is obtained. The pretreated raw material is then extracted in the usual manner, for example with approximately 100 kilograms of aqueous acetone at 50 degrees C. The acetone solution, containing fats and oils, is separated from the solid residue by filtration, the acetone is evaporated off and the fats and oils recovered. The oils and fats obtained in this manner contain little fatty acids and are light in color. Furthermore, the residue after extraction is a salt-free meal of high quality. Other organic solvents, such as benzine, benzene, chlorinated hydrocarbons, etc., may be used in place of acetone for extraction. Constant boiling point mixtures of methanol and methyl acetate, and of methanol, methyl acetate and acetone may also be employed. Karl F. Wilhelm. German Patent No. 551.101, filed October 20. 1929.





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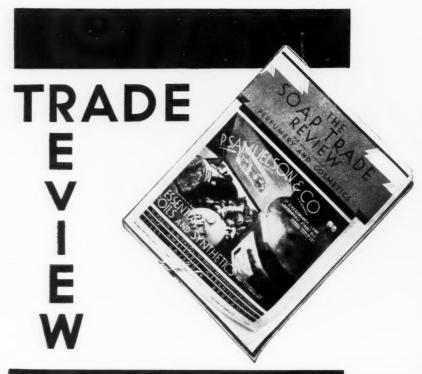
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IDEAS · INFORMATION



ON PRODUCTS AND PROCESSES

Turkey-red oils are obtained by adding one or two sulfonic acid groups at the double carbon bonds of a triglyceride. These oils resemble soaps, but are stable toward lime, magnesia, dilute acids and alkalies. Even better results are obtained by sulfonating alkyl esters and amides of fatty acids, or by esterifying lower aliphatic hydroxy-sulfonic acids with fatty acids. Good products are likewise obtained by reducing the carboxyl group of a fatty acid to an aldehyde group with or without the aid of a catalyst, and then esterifying with sulfuric acid. All these products have a soap character but do not form insoluble soaps with lime, etc., and do not hydrolyze in water. Detergents for use in wool washing are made by sulfonating hydrocarbons direct. H. Pomeranz. Seifensieder Zeitung, volume 59, pages 357 to 359.

A new process for recovering alcohols from wool grease consists in first saponifying the grease with alcoholic potash or soda, then precipitating with alcoholic solutions of alkaline earth salts, thereafter introducing carbon dioxide and evaporating off the alcohol (the introduction of carbon dioxide may be carried out during evaporation), dissolving the residue after filtration and evaporating the solvent to obtain the alcohols: 100 parts of lanolin are treated with 12 parts potassium hydroxide in 400 parts alcohol (96 per cent). After cooking for three hours, 18 parts of calcium chloride in 100 parts of alcohol are added, precipitate is filtered, hot filtrate treated with carbon dioxide, again filtered, alcohol distilled off. Residue is dissolved in 200 parts of acetone, filtered, acetone distilled off and 40 to 48 parts of wool grease alcohols obtained. Hugo Kroper. German Patent No. 552.830.

Sulfonic acids of aliphatic carboxylic acids, which are prepared by treating alpha-bromo-aliphatic carboxylic acids containing more than five carbon atoms in the molecule with alkali sulfite followed by acidification, are used as emulsifying and fat-splitting agents. For example, alpha-bromo-lauric acid, dissolved in ammonia, is boiled under reflux with aqueous ammonium sulfite. The resulting ammonium sulfonate of lauric acid may be used without purification, but the free acid is readily separated in pure condition by acidification with hydrochloric acid. H. T. Boehme A. G., Chemnitz, Germany. British Patent No. 353,475.

Action of various antioxidants on the oxidation of unsaturated fatty oils was studied, the rate of oxidation being determined by estimation of the iodine numbers with or without the addition of the catalyst. Olive oil was tested in this manner at 100° C. Duration of an incubation period for the oxidation of the oil depends on the antioxidizing action of unsaponifiable substances present in the oil. In the case of pure olein, the test showed no incubation period, oxidation beginning immediately. Drying agents, such as the oleates of copper, lead and manganese shorten the incubation period by inhibiting the action of the antioxidants present in the oil. Copper oleate and manganese linoleate showed as well antioxidizing action after the incubation period; lead oleate did not. Iodine accelerated the decomposition of the oxidized product of olive oil. The presence of stearic acid was found to shorten the incubation period for the oxidation of the oil but the action was not as marked as that of the aforementioned drying agents. B. Yamaguchi. Journal of the Chemical Society of Japan, volume 53, pages 54 to 63 and 63 to 70.

Wetting and emulsifying agents are produced by allowing salts of sulfurous acid to act on ricinic acid or its derivatives at temperatures varying between 80 and 100 degrees C. For example, 280 parts by weight of ricinic acid are dissolved in hot water along with 40 parts by weight of sodium hydroxide and then the solution is mixed with 150 parts by weight of 100 per cent. sodium bisulfite (in the form of 38 degrees Be, liquor). The mixture is well agitated mechanically and treated at 80 to 100 degrees C. until a sample does not show any oily layer after dilution with water and acidification. The reaction product is separated by salting-out with common salt and is obtained in the form of a lightcolored, perfectly clear oil. This oil is soluble in water and possesses marked wetting and emulsifying properties. I. G. Farbenindustrie A.G., Frankfurt-am-Main. Germany. German Patent No. 555,311, filed February 11. 1930.

Oxidized hydrocarbons above C_s, which contain up to 60 per cent of alcohols (preferably about 30 per cent), are sulfonated with or without the addition of cetyl. lauryl, or other higher molecular weight alcohols. Suitable starting materials for this process include oxidized paraffin wax, Russian petroleum and the like. British Patent No. 373,642.

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(Continued from Page 27)

separating the fatty acids, heat a small quantity of the latter with acetic anhydride, cool, place a few drops on a spot plate. and add a drop of H₂SO₄ (specific gravity = 1.53) to this. A

fugitive violet color indicates the presence of rosin.

F-2-k. Sugar. A qualitative test for sugar may be made as follows: Add a decided excess of hydrochloric acid to a water extract of the detergent, heat on a steam bath for 15 minutes. cool, filter from fatty acids, and test a portion of the filtrate which has been neutralized with sodium hydroxide solution by boiling for 2 minutes with an equal volume of boiling Fehling solution. The formation of red cuprous oxide indicates the presence of sugar.

F-2-1. Consistency Test, Type I. Keep the sample in a closed container (preferably an original package) at a temperature of 30 to 32° C. (86 to 89.6° F.) for 6 hours. Note by visual inspection and stirring the consistency of the material as compared

with the original, unheated sample.

F-2-m. Keeping Test, Type 1. Satisfactory keeping or storage tests can not be made in a short time, but the Government reserves the right to reject bids for material that has been found to deteriorate in service. (See Sections E-1-m and 1-6.)

F-3. Reagents.

F-3-a. Standard Sodium Hydroxide Solution. 0.25 N, or about 10 g. sodium hydroxide dissolved in water and diluted to 1 liter. Standardize against Bureau of Standards standard acid potas-

F-3-b. Standard Sulphuric Acid Solution. 0.25 N. or about 13 g. strong sulphuric acid (specific gravity = 1.84) diluted to 1 liter. Standardize against standard sodium hydroxide solution

F-3-c. Sulphuric Acid (Specific Gravity = 1.53.) Mix 62.5 ml of strong sulphuric acid (specific gravity = 1.84) with 61.5 ml of water.

F.3-d. Methyl Orange Indicator. Dissolve 1 g of methyl orange

in 1 liter of distilled water.

F-3-e. Phenolphthalein Indicator. Dissolve 1 g of pure phenolphthalein in 100 ml of 85 to 95 per cent ethyl alcohol.

F-3-f. Fehling Solution.

F.3-f (1). Copper Sulphate Solution. Dissolve 34.639 g of copper sulphate (CuSO4.5H2O) in water and dilute to 500 ml. F-3-f (2). Alkaline Tartrate Solution. Dissolve 173 g of Rochelle salts (NaKC1H1O6.4H2O) and 50 g of sodium hydroxide in water and dilute to 500 ml. Mix equal volumes of (1) and (2) immediately before use.

G. PACKAGING, PACKING AND MARKING.

G-1. Packaging.

G-1-a. Type I. Hand grit paste soap shall be furnished in tin cans with tight fitting covers and of approximately 1 lb., 2 lbs., or 4 lbs., as specified in the contract or order. See Section I-7.

G-1-b. Type II. Hand scouring powder shall be furnished in cans, cartons, or bulk, as specified in the contract or order.

See Section I-7.

G-2. Parking. Unless otherwise specified, the subject commodity shall be delivered in standard commercial containers, so constructed as to insure acceptance by common or other carriers. for safe transportaion, at the lowest rate, to the point of delivery.

G-3. Marking. Unless otherwise specified, shipping containers shall be marked with the name of the material, type, and the quantity contained therein, as defined by the contract or order under which the shipment is made, the name of the contractor, and the number of the contract or order.

G-4. Any special requirements of the individual departments are noted under Section H.

H. REQUIREMENTS APPLICABLE TO INDIVIDUAL DEPARTMENTS.

H-1. The following Departmental specifications of the issue in effect on date of invitation for bids shall respectively form a part of this specification, insofar as the activities noted are concerned.

H-1-a. Army. U. S. Army specification No. 100-2, Standard Specification for Marking Shipments.

H-1-b. Navy Department General Specifications for Inspection of Material (copies of which may be obtained without cost upon application to the Bureau of Supplies and Accounts, Navy Department, Washington, D. C.)

H-1-c. Marine Corps. Instructions issued by the Quartermaster.

I. Notes.

I-1. Purchasers should specify the type required.

I-2. Basis of Purchase. Detergent for mechanics' use of each type shall be purchased by net weight. Detergent for mechanics' use is subject to a possible gain or loss of weight, depending upon packaging, atmospheric and/or storage conditions. Therefore the time of computing net weight with reference to acceptance or delivery should be specified in the contract or order.

I-3. Purchasers should specify if a mutually agreed upon sample is desired for comparison with deliveries for color or odor.

(See Sections E-1-b, E-1-c, E-2-b, E-2-c, and F-1-c.)

I-4. The inspector or purchasing officer shall determine whether or not the material is satisfactory as regards color and odor. If unsatisfactory the material should be rejected and not submitted to the testing laboratory for the tests given under Section F-2. (See Sections E-1-b, E-1-c, E-2-b, E-2-c, and F-1-c.)

I-5. The inspector or purchasing officer shall determine whether or not the material is satisfactory as regards the removal of oil, grease, etc., from the hands. If unsatisfactory the material should be rejected and not submitted to the testing laboratory for the tests given under Section F-2. (See Sections C-1 and

F-1-c.)

1.6. The purchasing officer should note whether the material offered is a brand or make that has been found unsatisfactory in service as regards keeping or storage. (See Sections E-1-m and F-2-1.)

I-7. Purchasers should specify the type of shipping container desired and the approximate weight of material per unit. (See

Sections G-1-a and G-1-b.)

I-8. Federal Specification RR-S-366, for "Sieves; Standard, Testing," can be procured at five cents per copy from the Superintendent of Documents. (See Sections F-2-i and I-12.)

1.9. It is believed that this specification adequately describes the characteristics necessary to secure the desired matrial, and that normally no samples will be necessary prior to award to determine compliance with this specification. If, for any particular purpose, samples with bids are necessary, they should be specifically asked for in the invitation for bids, and the particular purpose to be served by the bid samples should be definitely stated the specification to apply in all other respects.

I-10. This specification governs all United States Government purchases of this commodity. Users are requested to retain this

specification in permanent file until a revision is issued.

I-11. Interested parties are advised that an Alphabetical Index of Federal Specifications may be purchased as noted in the paragraph next below, price to be obtained from the Superintendent of Documents.

1-12. Copies of this specification may be obtained upon application, accompanied by money order or coupon, or cash, to Superintendent of Documents, Government Printing Office, Washington,

Notice: When Government drawings, specifications, or other data are used for any government procurement operation, the United States Government thereby incurs no responsibility or any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Fats and oils are stabilized against rancidity by treatment with five to ten per cent of palm oil rich in caretonoid pigment. Thus lard or corn oil may be treated in this manner. The mixture is then treated with caustic alkali to remove the free fatty acids and heated above the boiling point of water but below the temperature of decomposition to effect bleaching. Swift & Co. United States Patent No. 1,890,585.

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with 15 Gallons of CONCENTRATED NOX - KWIK for special DETHATOR VAPORIZER



. . . the DETHATOR, the last word in asphyxiating insect pests. Larger capacity, quicker action, greater adjustment, cast aluminum en bloc nozzle and air chamber all in handsome feather-ex finish portable container with hand grip. Automatically shuts itself off when water-line is reached. Plugs into any wall socket and generates its own steam . . . powerful, safe, simple, and practical. Used with a SPECIAL FORMULA of CONCEN-TRATED NOX-KWIK FLY SPRAY, this latest development of the U. S. Sanitary Specialties Corp. forms the deadliest combination yet devised . . . it is not, however, harmful nor poisonous to human beings. With every 15 gallon drum of CONCENTRATED NOX-KWIK FLY SPRAY (for a limited time only) we will furnish this U. S. DETHATOR FREE OF COST. Order as many deals as you need-but do it now. For hospitals, meat markets, candy factories, etc. Sells on demonstration. Highly concentrated, greatly exceeding the requirements

of the Peet-Grady test. Your price allows a handsome profit, yet retails for less than most concentrates selling at \$8.00 a gallon. CONCEN-TRATED NOX-KWIK FLY SPRAY is extremely volatile and guaranteed stainless. When vaporized with the noiseless DETHATOR, it spreads rapidly, filling all nooks and crannies throughout the room. Just plug in, close the room and in seconds after the action begins, the battle is won. PLACE YOUR ORDER NOW.



15 gallon drum of CONCENTRATED NOX-KWIK INSECTICIDE SPRAY

BUILD BUSINESS UNDER YOUR PRIVATE LABEL

LUSTER BRYTE WAX — NO RUB water emulsion wax (liquid). Requires no buffing after application . . . dries glossy in 10 to 15 minutes . . . contains high percentage of Carnauba Wax . . . cuts labor costs to a minimum . . . neutral, no excess alkali. In 65, 35, 15, 10, 5 gal. drums and 1 gal. cans.

AERZONATOR BLOCS are extremely hard—hence longer life . . . contain 100% para, finest essential oils. Six popular sizes, 3½—1—8—16—25 or 40 ozs.

MOTHOBLOCS kill and repell moths and their larvae (send for special report of National Laboratories) . . . furnished in individual 4 oz. size hang-up, cardboard containers, or large sizes with metal wall containers.

NEUTRODOR URINAL BLOCETTES packed in lithographed metal tubes, either with or without our name . . . space left for dealer's name . . . muffin shaped, 4 oz. Cellophane wrapped . . not soluble in moisture . . . packed 12 blocettes to a tube.

AEROZONE CRYSTALS are packed in easily used sifter-top lithographed cans . . . either with or without our name . . . supplied in Cedar, Pine, Rose, Lilac, Oriental Bouquet Fragrances . . . 1 pound net—24 to a case . . . processed so they will not solidify in can.

SOAP DEPT, liquid toilet soaps, mechanic's soap, scrubbing soaps, green oil soaps, shower bath soaps, automobile

SOAP DISPENSER DEPT, soaperior soap, dispensers, all types for industrial or hospital installations.

hospital installations.

DISINFECTANT DEPT. coal tar products (co-efficient 1 to 20), pine oil products, clorine products, live stock dips, cresol compound U. S. P., or Technical, formaldehyde, odorless disinfectants, pertumed sprays.

POLISH DEPT. metal polishes, furniture polishes, automobile polishes, floor and dressing oils, waxes.

SPECIALTIES DEPT. indoor chemical toilets, sprayers (hand and power), drinking fountains, aerzonator air conditioners, vending machines and sanitary napkins.

MISCELLANEOUS formaldehyde (umi-

MISCELLANEOUS formaldehyde fumi-

miscellaneOUS formaldehyde fumi-gators, chemical pipe cleaner, de-odortzing powders, sweeping com-pounds, toilet bowl cleaners, weed killers, gum removers, ratacides. INSECTICIDE DEPT. liquid extermina-tors, powder exterminators, mos-quitocides, gas fumigating machines, vaporizers, concentrated insecti-cides.

S. SANITARY SPECIALTIES CORPORATION

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Pure Paradichlorbenzene

The Monsanto name on Paradichlorbenzene shipments is your assurance that the material is fresh, uniform and free-flowing. Available in three standard sizes of crystals in containers from one pound to 200 pounds, Monsanto Santochlor is effective and satisfactory for all of its various applications in deodorizing and moth control.

Monsanto Chemical Company

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Freedom From

Many insecticide manufacturers have run into serious difficulties as a result of using the wrong type of pyrethrum extract. Here are some of them:

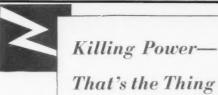
- (a) Separation and Sedimentation.
- (b) Cumulative deterioration.
- (c) Excess solids not soluble in kerosene, which greatly increase the risk of staining.
- (d) Wrong color.
- (e) Complications in perfuming due to precipitation of colloidal or soluble material.
- (f) Non-uniformity as a result of theoretical standardization instead of actual standardization.
- (g) Possible mild toxicity to humans and animals from residual primary solvent.

You can escape these difficulties by using standardized and stabilized POWCO BRAND Basic Pyrethrum Extracts.

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Extract Troubles

Just as the best Pyrethrum Flowers may be ruined by improper milling methods or equipment, so likewise Pyrethrum Extracts manufactured by methods which jeopardize the active principle may easily lead to unfortunate results in the finished liquid insecticide. Pyrethrum powders and extracts must be correctly processed and definitely standardized,—not theoretically, but actually, if they are to be safe and dependable.

When you buy POWCO BRAND Pyrethrum Products, you are certain to receive products which are correctly manufactured to make them both dependable and safe, and of definite, standardized high killing power.

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THEY LOOK ALIKE

but they're different



UNIFORM KILLING POWER

There's

NO GUESSWORK

About the Killing Power of PYROCIDE 20

THE Pyrocide 20 story is very simple. There's no secret. Here's our guarantee . . .

Pyrocide 20 is guaranteed to contain 2.15 grams of pyrethrins per 100 cc. (2.61% pyrethrins.) Each gallon contains all the active principle from 20 pounds of flowers having a pyrethrin content of .90%. This is the guarantee you receive when you buy Pyrocide 20.

Pyrocide 20 is shipped in steel drums of 15, 30 and 53 gallons from warehouses in New York, Los Angeles, Minneapolis and several foreign cities. We can also supply pyrethrum flowers of known pyrethrin content in whole, ground or powdered form.

REMEMBER, if you want to be <u>sure</u> of your finished product, use Pyrocide 20.

Write today, McLAUGHLIN GORMLEY KING CO., 1715 Fifth Street S.E., Minneapolis, Minnesota Pyrethrum Specialists Since 1901

PYROCIDE 20 STANDARDIZED EXTRACT OF PYRETHRUM FLOWERS

Announcing....

DEO-BASE

Reg. U. S. Pat. Off.

Deodorized Base | for Fly Sprays

DEO-BASE is a petroleum oil produced and refined to complete freedom from Kerosene odor, making it the best product available today for use in fly sprays and other spray insecticides.

The modern prerequisite is that a fly spray be odorless—or that it be very slightly and pleasantly perfumed.

Neither is possible if ordinary Kerosene is used.

DEO-BASE is especially well adapted for use with odorless pyrethrum extracts.

DEO-BASE offers new sales opportunities and therefore increased profits for you.

DEO-BASE conforms in every detail with the specifications of the National Association of Insecticide & Disinfectant Manufacturers.



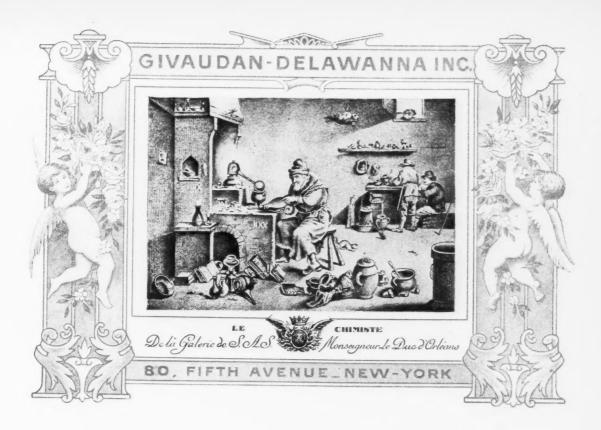
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Refiners of White Oils and Petrolatums

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3 Popular Reodorants

CITRENE instead of Citronella in your soap, cleaners and polishes. Stronger, pleasanter, cheaper.

FLORENE — Sharp, clean, refreshing scent that covers kerosene odor. Excellent for fly sprays and insecticides.

DRENE — Powerful, low price oil for use alone or in combination in sprays, in polishes.

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STAINLESS CATTLE SPRAY

A light colored liquid for spraying cattle to rid them of annoying flies and insects. Contains the active principle of pyrethrum. Will not stain, blister or burn, and has no disagreeable odor. A popular product with farmers and dairymen. Supplied in bulk to the distributing trade only.

PES-TOX

An efficient liquid household insecticide of the pyrethrum type, pleasantly scented. Surpasses in effectiveness the standard of the National Association of Insecticide and Disinfectant Manufacturers. Each lot carefully controlled by the Peet - Grady method. Supplied in bulk for distributors to resell under their own trade-names. Also suppliers of pyrethrum concentrate.



PINE OIL DISINFECTANTS

made from pure steam-distilled pine oil, and agreeable in odor and dilute with water to form rich, milk-white emulsions.

HIPINE, made according to the formula of the Hygienic Laboratory has a phenol coefficient of four to five.

ORPINE, prepared from slightly different ingredients, has a coefficient of three to four.

CLEARPINE is a specially refined product, very light in color, and has a phenol coefficient of four to five.

All are high-grade products, reasonably priced. Every lot chemically controlled and standardized. Supplied only in bulk to the distributing trade for resale under their own names and labels.



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BUGS and HUMBUGS We Can Kill Both Kinds for You

We don't believe in overselling-hence

no "humbug"

Our Pyrethrum Products actually give the most "kill" per dollar – hence

no "live bugs"

Ask Us for

Pyrethrum Concentrate

No. 15

Pyrethrum Concentrate with odorless oil Pyrethrum Powder

Derris Powder

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Mr. Joseph Fahey, Cotton Belt Building, St. Louis, Missouri.

STORY OF A MAN IMPROVING HIS PACKAGE



ANNOUNCING THE NEW BREUER TORNADO VAPO STEAM SPRAYER

EASY TO USE — HIGHER QUALITY — MORE CAPACITY

The steam container jar is made of heat resisting glass, not the ordinary common glass jar — a feature only the TOR-NADO offers.

If you want a real outfit with greater capacity and with all the safety features, offer your customers TORNADO.



You can spray from a few ounces to one quart with the TORNADO. A real, full capacity quart sprayer.

Adjustable nozzle for spraying at any angle without tilting or upsetting sprayer.

The TORNADO will spray concentrated or regular insecticides.

We Do Not Sell Insecticides. Our Business Is Manufacturing Sprayers.

FEATURES

The right spray without that violent water action.

Will spray for 30 minutes without additional water.

Adjustable nozzle for spraying at any angle.

Heat resisting quart glass steam jar.

All covers and fittings Bakelite.

No shorts or electric shocks.



FEATURES

Electrodes covered with Bakelite tubings.

Safety valve for pressure regulation. Bakelite water fill plug.

10 foot rubber cable with nonbreakable rubber plugs.

Salt measuring scoop.

Full quart capacity insecticide jar. You can put in from 6 ounces up to 32 ounces, concentrate or regular. Attractively finished throughout.

If you are looking for a real Vapo Sprayer and one that will give the proper service and full capacity, we have it in the Tornado Vapo Steam Sprayer. Write for circular and prices.

BREUER ELECTRIC MFG. CO. 862 Blackbawk St. CHICAGO, ILL.

WE ALSO are selling hundreds of TORNADO Electric Sprayers. You should handle both the Vapo Steam Sprayer and the electric so you can meet every spraying problem.



TORNADO Model 50 (at left) 1 pint glass jar.
Model 51 has 1 quart glass jar.
Both fan type units. Will spray 8 to 10 feet. 1/8 H.P.
Universal motor. 20 feet of rubber cable.

TORNADO Model 53 (at right) Compressor type. 1 quart metal container with adjustable volume control. 1/4 H.P. Universal motor. 20 feet of rubber cable.



Perfumes for Insecticides

For insecticides made with pyrethrum and kerosene, we suggest using one to six drams of any of the following oils in one gallon of finished spray.

Orange Blossom No. 96	\$4.00 lb.	Rose No. 12	\$2.00
Orange Flower No. 11	3.00	Lilac No. 1	3.50
Orange Flower No. 12	2.00	Lilac No. 2	3.00
Cedar No. 11	2.00	Lilac No. 3	2.50
Cedar No. 12	1.00	Lilac No. 4	1.10
Jasmin No. 11	2.50	Lilacine No. 11	1.10
Jasmin No. 12	1.50	Vanilla Bouquet for Spray	3.00
Lavender No. 135	1.00	Bouquet No. 118	1.50
New Mown Hay No. 11	3.75	Bouquet No. 11	3.00
New Mown Hay No. 12	1.50	Bouquet No. 12	2.00
New Mown Hay No. 13	2.00	Spray Odor No. 195	4.80
Oriental	1.50	Spray Odor No. 353	4.50
Narcissus	2.25	Spray Odor No. 457	3.75
Violet No. 11	3.00	Spray Odor No. 276	3.00
Violet No. 12	1.75	Spray Odor No. 259	2.00
Mint No. 11	1.50	Spray Odor No. 11	5.50
Mint No. 12	1.00	Spray Odor No. 12	5.00
Honeysuckle No. 11	3.25	Spray Odor D. No. 5	5.25
Honeysuckle No. 12	3.00	Tuberose	4.25
Rose No. 11	2.25		4-5

Perfumes for Deodorizing Blocks

Special solutions to be used from 1 to 2 pounds to 100 pounds of deodorizing crystals. They can be used with either paradichlorbenzene or naphthaline, or a combination of the two. Any of the following colors may be used with any of the odors listed below.

Colors		Odors	
Amber Blue	Bouquet—many state type wante	bouquets to choose	from,
Chypre green	Cedar	Orange	
Light green	Hav	Oriental	
Rose	Jasmin	Peppermint	
Violet	Lilac	Pine	
Yellow	Lily	Rose	
	Narcissus	Violet	

Grade A—any of the above odors with or without color..\$2.50 lb. Grade B—any of the above odors with or without color..\$1.75 lb.

van Ameringen-Haebler, Inc.

Aromatic Essentials

315 Fourth Avenue, New York

180 No. Wacker Drive, Chicago

438 West 48th St., Los Angeles

42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

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Specialists in doing one thing well



For over a quarter century manufacturers of

TESTED and CERTIFIED

DISINFECTANTS

for the wholesale trade

BAIRD & McGUIRE, Inc. HOLBROOK, MASS.

ST. LOUIS, MO.





INSECTICIDE DISINFECTANT S E C T I O N



A Department of SOAP

SOAP is official publication of The National Assn. of Insecticide and Disinfectant Manufacturers.

Hold Mid-Year Insecticide and Disinfectant Meeting

At Edgewater Beach Hotel, Chicago—200 Attend Meeting—Adopt F. D. A. Method for Disinfectant Testing—Elect C. H. Peet to Board—Appoint Committee on Industries Recovery Bill—To Hold December Annual Meeting in New York.

HE nineteenth mid-year meeting of the National Association of Insecticide and Disinfectant Manufacturers came to a close on June 6 at the Edgewater Beach Hotel, Chicago, after one of the most closely attended series of sessions in the history of the Association. The proposed industries recovery bill and subjects relating to its enforcement through trade association activities were widely discussed at the meeting. The bill also came up for discussion at the mid-year meeting of the Board of Governors of the Association which was held at the hotel on Sunday evening, June 4, preceding the regular meeting. A committee composed of W. J. Andree of Sinclair Refining Co., New York, representing the insecticide manufacturers, H. W. Hamilton of the White Tar Co., Kearny, N. J., representing the disinfectant manufacturers, and J. L. Brenn of the Huntington Laboratories, Huntington, Ind., representing the liquid soap manufacturers, was appointed by President Peter Dougan to study the bill, to keep in touch with its progress in Congress, and report to the Board. It was generally agreed that little or nothing in the way of actual adoption of a plan under the bill could be

done until its final form is agreed upon and it is passed by Congress.

After considerable discussion on the F. D. A. Method of testing the phenol coefficient of disinfectants,—the official method of the Food and Drug Administration of the Department of Agriculture,—the Association adopted this method as official for its membership. After short addresses in favor of immediate adoption by Simon Selig of The Selig Co., Atlanta, Ga., Dr. Emil Klarmann of Lehn & Fink, Inc., Bloomfield, N. J., and H. W. Hamilton of the White Tar Co., the motion was passed. This action culminates a two-year consideration of the method by the Association. In this connection a resolution was also adopted expressing the readiness of the Association to act in accord with the Food and Drug Administration in further research in testing methods.

Dr. Charles H. Peet of Rohm & Haas, Inc., Philadelphia, was elected to fill the vacancy on the Board of Governors of the Association, created by the resignation recently of Evans E. A. Stone. Altogether 200 member firms and guests were registered at the convention. At the mid-year banquet which this year was held in the form of a beefsteak dinner, 125 were present. Those who contributed to make the affair a success included ginger ale by Wilson & Bennett Co.; beer by John Powell & Co.; aprons and hats by Continental Can Co.; serpentines by Hudson Manufacturing Co.; noise makers by Breuer Electric Manufacturing Co. Grant A. Dorland was in charge of the banquet and entertainment. W. J.

Andree acted as chairman of the general convention committee.

A full program of reports and papers was given. Reports of important committees are given in the following pages. Various papers which do not appear in this issue will be published next month, also important discussion on reports and papers from the floor. In his address to the meeting, President Peter Dougan stated:

SINCE our annual meeting in December, 1933, many of us have found that business conditions and the outlook on affairs in general have obliged us to make many adjustments.

Where formerly there was an inclination to let others lead and decide what we want and what we ought to do, today it is necessary to think along new lines and to bring our business affairs into line with the requirements of today.

Events are crowding one another so closely and so quickly that even as this address is written, I do not know but what by June 5th as we meet there will not be some thought along these lines which will merit a good deal of our attention.

It is quite apparent from the views recently given out in Washington that business recovery is going to be disciplined and controlled. From my reading of the Government reports it is possible that Business can get a workable control of its own businesses by methods, largely of its own devising with a probability of having the rulings made by its own trade councils and have their rulings enforced by Governmental Authority. If business stubbornly fights change, and will not cooperate with Washington or its associations, it will get extreme and maybe drastic action.

The National Association of Insecticide and Disinfectant Manufacturers, Inc., is our organization through which the different member firms can express themselves collectively on questions of our general welfare. It is based on the principle that more can be accomplished by working together than is possible by individual effort.

Meeting here in Chicago for our nineteenth mid-year session the aim is to discuss our problems. We must think along new lines not for our selfish good as individuals but for the good of our Disinfectant, Insecticide and Liquid Soap Industries.

In dealing with the issues that face us and in our efforts to establish constructive policies, the initiative lies with the several committees. Their reports, which are the most important part of our program, give us the conclusions of each group, after the different questions have been considered by the Commercial Scientific and Technical men in each section.

The questions they will discuss cover from the commercial viewpoint, style of packages, selling and marketing, trade practices and opportunities to be developed for the greater use and service which the public can have from our products; from the Scientific and Technical viewpoint, questions relating to the quality of the products, claims which can be made and wording on labels and in circulars.

If your experience has shown a different way to successfully meet a particular problem, if you have questions to ask, this is the time and place to speak up and we hope you will do so freely

Quite naturally, these committee reports have to do with our

M. C. Goodrich of the Hudson Manufacturing Co. was winner of the Insecticide & Disinfectant Golf Tournament, held Sunday, June 4, on the Bob-O-Link course near Chicago. He had a 90. W. J. Andree of Sinclair Refining won the low net with a 75. L. J. LaCava of Continental Can, winner of the high score prize of a year ago, repeated in the event this year winning in a canter. The winner of low gross in 1932, S. H. Bell of Koppers Products Co., did not defend his title this year. The scores for the difficult Bob-O-Link layout were uniformly high among all the players.



President Peter Dougan at the Chicago meeting. True to his clan, he is adorned with a Scotch plaid necktie.

own business questions and consitute those things which have to do with making and selling goods. I call them our internal questions for they are determined by our individual policies of doing business.

Each man has made those policies for his own business, and each of us would probably argue that they were made so that his could increase his sales and business profits or were made necessary in order to meet competition. Sometimes these policies, while appearing to benefit a business, are harmful to the industry as a whole. If the industry is injured then that one business must go down, no matter if the policy adopted should be temporarily successful.

We, therefore, ask that you share with us your knowledge and experience as freely as these committees are giving you the opinions expressed as to policies which they are advocating for the benefit of each industry represented in our membership.

Besides these internal questions, we also have to consider those problems which come to us from the outside, as represented by the laws and regulations which we must observe in order to do business. With the sales tax laws passed in 1933 by eleven additional states, nothing much could be done. They apply to all industries and having been found necessary in order to build up the finances of the different states, we need to make adjustments in billing goods so as to take care of such taxes. Where it is within the State Law I think it would be a help if all of us followed the uniform practice of putting an additional line to our invoices stating the amount of the sales tax and adding same to the cost of the goods.

The regulatory laws as will be reported by our Secretary have been numerous.

As one gives thought to these laws we must realize that in many instances they could have been made better laws, and less drastic if we had done a good inside job ourselves by giving a clear statement of what our products are, what they will do and how they should be used.

Inasmuch as our products are used for safeguarding and protecting good health, it is to be expected that there will be regulatory laws. Such laws, however, I believe can be kept from being harmful to our industries if we will come to an agreement on the constructive ideas presented at this and former meetings.

The new legislation to be written in the Federal Food and Drug Act, I think gives point to what has been said. Whether we will have a complete new Food and Drug Act, or a revision of the present act is not known at this writing.

Mr. Walter G. Campbell, Chief of the Food & Drug Administration, has advocated for several years that the Food and Drugs Act should be strengthened. The Department has also been advocating that some sort of legislation is needed which will re-



Vice-President Charley McCormick and Secretary Harry Cole taking time-out for a short conference at the Chicago meeting.

quire manufacturers to tell the truth in advertisements just as they are required to tell the truth on their labels.

This Association of ours has right along been bringing out the facts regarding products and those in the Association and outside who have followed the policies we have advocated, will find that they need hardly make any changes in their products or labels.

Those who have not been willing to adopt such forward looking plans, voluntarily, will find they must now do so by a law, made by others, rather than by adopting a uniform trade practice among themselves.

At the present writing we understand that premise disinfectants and insecticides will remain under the terms of the Insecticide Act of 1910. Disinfectants recommended for Antiseptic uses or on the body, however, will probably be subject to the provisions of the Drugs Act as well as the Insecticide Act.

Meetings are now in progress with representatives from the Food and Drug industries and as new developments occur our members will hear of them in bulletins from the office of our Secretary.

For several years as you know, the Capper-Kelly bill has been introduced in Congress but failed of enactment. With the same purposes in view, a new bill has now been introduced consisting of a single paragraph defining the intent of the Anti-Trust Law. In a joint statement Senator Capper and Representative Kelly have said, "The outstanding need today is for stabilized prices at fair levels. We seek to provide for fair competition in the distribution of identified merchandise."

This bill may be of considerable interest to us in shaping policies that have to do with price competition on our "trade marked" products.

At our meetings last year, there was discussion about the information contained in Government and State Bulletins regarding disinfectants and insecticides and examples were cited where the information if followed instead of being a help to the reader might be a hurt through dependence on a product that would not do the work.

Just how far our Scientific men have proceeded in the matter I do not know. That idea is not only good in itself, but leads to the thought that our Scientific Sections might be a great help to us if they would find a common ground for us to work with Doctors, Health Officers, etc., in regard to disinfectants so that the usefulness of our products might be considered when we think these men would find them of great helpfulness in their professional work.

A start has been made along this line by the grant made by

our Association which resulted in the Patterson Report and it has been gratifying to find that in Washington the Patterson Report has been of influence and usefulness.

My thought now is that the Nomenclature Section should give study and present a plan for the preparation of a newspaper article, either as an abstract or a summary of the Patterson Report, which in turn could be sent to editors of newspapers who give space in their papers to questions of sanitation and to the agricultural press which circulate among farmers, poultry breeders and live stock owners.

If later on these editors are required by law to check the claims made in advertisements the definitions given by Dr. Patterson will be helpful to them.

In conclusion I wish to say, Thank You, to the Chairmen of Committees and Sections also the members serving with them for the work they have done. To also express appreciation for the information that has been given to me so freely by Harry W. Cole, Secretary. I have gained much by getting the benefit of the experience all these men have had and which has been given to me so freely.

From this point, the nineteenth Mid-Year Meeting is yours. Let us be frank and honest in our opinions. When we leave this meeting and go home, let us put into practice, whole-heartedly, those policies that we have collectively discussed and decided.

As the industry which claims your greatest interest, be it Disinfectant, Household Insecticides or Liquid soaps, benefits and prospers—you will find that your own business prospers,

Report of Committee on Insecticides By Charles P. McCormick

THE General Insecticide Committee has been a steering committee—to see that certain definite problems were tabulated and solved, and other new problems discussed with the hope of solving them.

First: The Insecticide business today faces a brighter future than it has for several years past, for many reasons: The "higher prices of commodities," yet low inventory stocks.

"Export Business," which suffered so disastrously in the last few years, should be coming back shortly because of possible reciprocal tariffs and the elimination of many unjust tariffs. "Differences in exchange" have led us into many difficulties and the approach to a common settlement should help materially by eliminating gambling in the purchase of raw materials and increasing production profits.

"Attitude of the people" in general is veering towards quality merchandise again. While talking to a typical American merchant, he finishes by saying: "After all, 'price' is the only single thing that matters today." My reply was: "I cannot see it that way." He said: "Prove it." Then, after questioning him thoroughly on his personal purchases. I found that he was driving a quality Buick car, was wearing a \$65 quality suit of clothes, had a quality Gruen watch, lived in a quality \$20,000 home, bought the finest quality shoes, quality hats and quality ties that he could, and yet he still said only "price goods" counted. He was trying to find a reason for selling "price goods" instead of returning to quality merchandise. He was a living example of "mob" psychology. Many of us do not analyze the situation-simply follow the line of least resistance. "Quality" has come back stronger in the last ninety days. An imitator of a good product not only robs the originator of his past market, but demoralizes his trade so that his trade comes back skeptically. These conditions will stimulate business and increase the turnover, which, in turn, should assist us all in getting more profit.

Second: For the benefit of the few who have not studied the new partnership in business plan between the Government and the trade associations, I would like to review S-1812 and see how it may affect us as a trade body. The Wagner Bill introduced on May 15, 1933. "To Encourage National Recovery and to Foster Fair Competition and To Provide for the Construction of Certain Useful Works and for other Purposes as Well" is a history-making step. To summarize it by sections:

Sec. 1: It states that anything undermining living conditions will be eliminated through the power of Congress and freedom will be given to trade groups to handle unfair practices.

(Turn to Page 87)

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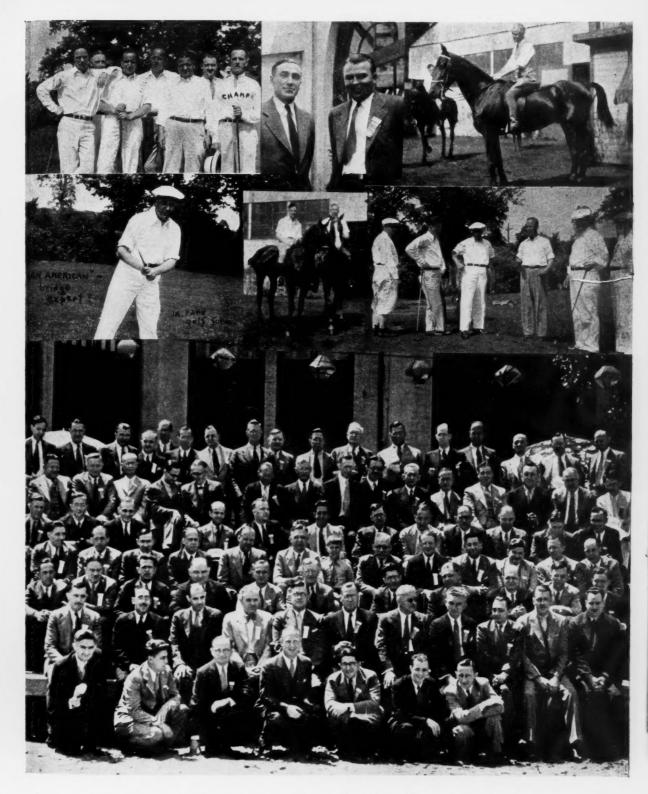
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A few snapshots taken at the Chicago meeting of the National Association of Insecticide & Disinfectant Manufacturers at the Edgewater Beach Hotel. At top left, "Lavish" La Cava has just told the boys that his cans never leak. They are replying in kind. At the top right, we have two normal size men with our three "Liquid Soap Giants." It seems like Simon Selig in the above left is mad about something. Jim Varley must have just told him one of those Lancashire alleged jokes. Bottom on the right, Doc Klarmann has apparently just been stung in the pants by a bee or something.



Here we have a group picture. If you are able to pick yourself out from this sun-struck mob, write to the editor for your prize. Above we have one Huckins of Toledo on "Plug." He led the horsemen on a dash across Chicago. Then on the left, we have a few golfers, including Max Goodrich, the "winner and new champeen," with his front appropriately decorated. Again on the left, the one and only Van Ameringen, otherwise states Harold King, the great "Van American," bridge expert and teacher and golf star. Also the fellow with the loose, baggy pants standing just under the horse is none other than Dick Quortrup.

Perfumes For

THEATRE SPRAYS

It makes no difference whether you use alcohol or water as a base. We can supply an odor to meet your requirements—an odor that will prove popular with your customers.

A few suggestions

for alcohol base sprays

Used one ounce to two gallons of alcohol—either full strength or diluted

for water base sprays

Lb.
Bouquet W. S. No. 636...\$3.25
Honeysuckle W. S. No. 561 2.25
Narcissus W. S. No. 3855. 2.75
New Mown Hay W. S.
No. 260 2.50
Lilac W. S. No. 19...... 2.50
Oriental W. S. No. 3858.. 2.50
Rose W. S. No. 560..... 2.75
Trefle W. S. No. 4855.... 3.00

Used one ounce to three or five gallons of water according to strength desired

Violet W. S. No. 261 . . . 2.75



P. R. DREYER INC.

12 E. 12th Street

New York

"It's the Odor that Sells the Product"

Insecticide and Disinfectant Meeting

(From Page 83)

Sec. 2: Under administrative agencies, the President is empowered to proceed practically with unlimited powers for two years at least.

Sec. 3: Under codes, any trade association may, upon application, secure sanction from the President on a code for fair competition with no inequitable restrictions or admissions or to promote monopolies or to oppress small enterprises. He may impose special conditions or exceptions in all cases for the public's sake. Any violation under the Federal Trade Commission Act may be fined not less than \$500 for each offense.

Sec. 4 and 5: Here we have the agreement and licensing of such agreement and exemption within sixty days from the pro-

visions of the anti-trust laws.

Under Sections 6 and 7, the trade bodies must be representative of an industry prior to being eligible for any benefit—every step must be voluntary and not compulsory. A statute in every code and regulation allows the President full and free power to establish with or without mutual agreement the maximum hours of labor, the minimum rate of pay according to locality, skill, etc.

Sec. 8 refers to the Agricultural Adjustment Act.

Sec. 9 gives rules and regulations.

Summarizing, No. 1712, if enacted, will give this convention, representative of the industry, an opportunity to sit down deliberately and discuss legally every unfair practice in the industry, and would allow it to act by special permission of the President of the United States and the Board. This should mean a new day for profits—it means that the 10 per cent of the industry that wants to demoralize the business and upset it by resorting to unfair practices, will have to be "good" and that the other 90 per cent of the industry will make the changes necessary for the good of the majority—in other words, a live and let live policy. If this spirit is carried out sincerely, it can help certain crumbling industries back to their feet. It will sanction legally the discussion of prices, free deals, special allowances and whatnot.

The third part of this report deals with the actual sub-committees, although actually they are far from being sub-committees for they have their own work and are presenting to the convention those facts that are particularly adaptable to their work. The Standardization, Scientific and Entomological Committees will, therefore, make their reports separately.

The Scientific Section's report of work, through the able chairmanship of Dr. C. H. Peet, with Dr. Thomas Lewis and R. W.

Birdsall, will outline:

1—A review of the latest developments regarding the use and effectiveness, etc., of pyrethrum, together with abstracts of the patents in the field.

2—A general survey of the latest developments in the field of rotenone insecticides, together with abstracts of patents.

3—Developments in the field of synthetic insecticides with abstracts of patents.

The Entomological Section's report (Dr. Alfred Weed Chairman) will cover:

1st Sec.—A.—Symptoms induced by pyrethrum when insects are treated with it.

B-A summary of its mode of action-the way it gets into insects bodies, etc.

2nd Sec.—A—A brief discussion of the literature on the subject with outstanding evidence gained from these research studies.

B-Discussion of symptoms.

Dr. Weed has a series of pictures giving some of the details of insect morthology showing natural openings, glandular and hair structures, as well as portions of internal anatomy which will be helpful in presenting this question or any other problems which may come up later on in the way of a report dealing with an insecticide.

Standardization Committee: its plans must necessarily consume more than a few months time, therefore the Standardization Committee will be forced to submit its complete report in December. Its members have been working towards the accomplishment of certain definite factors and while the report will have to be tabled until later, I am sure that the Association need not worry about the ultimate outcome of the work of the Standard works are successful to the standard works are successful.



Dr. Charles H. Peet of Rohm & Haas, Inc., Philadelphia, was elected a member of the Board of Governors at the Chicago meeting to serve in place of Evans E. A. Stone, resigned.

Samuel H. Bell, vice-president, reported for the Disinfectant Committee in the form of six terse recommendations, one of which was recommedation of adoption of the F.D.A. Method.





Treasurer John Powell had a permanent wave especially for the Chicago meeting, he admitted while counting the convention profits after the close of festivities.

ardization Committee under the able chairmanship of N. J. Gothard.

The Status of Pyrethrum Concentrates

At the December meeting it was mentioned that many misleading terms are drifting into the trade relative to the designation of strength of various extracts available. The trade papers are continually referring to terms as follows 4 to 1, 5 to 1, 20 to 1, etc., which apparently have no meaning. It has been observed that extracts which sell under the same heading coming from various competitors, show a great variation in price as well as quality. The purchaser reasonably assumes that when an extract is labeled 20 to 1 it possesses a certain quality without regard to its source.

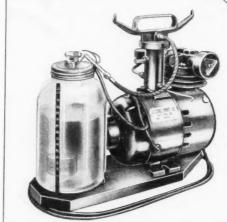
It is definitely understood that any legitimate manufacturer can manufacture a 20 to 1 at a certain cost. This cost is very nearly uniform and one should not lose sight of the fact that it is entirely ethical to use the old-fashioned words "legitimate profit" on any product. By the same token, low price should mean less quality. It seems to me that the only legitimate method of approach to improve this condition is to designate definitely that the term 5 to 1 or 20 to 1, etc., be taken to mean that the "5" or the "20" means the number of gallons of oil that shall be added to one gallon of extract and that the finished spray so manufactured shall be in line with the quality placed on household insecticides by this Association. This method of approach

Announcing a Complete New Line of Automatic Electric Insecticide Sprayers

Keeping pace with the requirements of the insecticide industry, Sprayit now offers a complete new line of Automatic Electric sprayers.

The Automatic Sprayits, illustrated on this page, combines a range of capacities that will efficiently meet every insecticide spraying requirement ranging from the smallest store to the largest warehouse. Designed for spraying efficiency and operating quietness, suitable for use with either standard insecticide or more concentrated materials, reflecting the compactness and easy portability gained through years of manufacturing fine paint sprayers, they remove the human element of error in the application of your product. No fuss, no muss, no waste, just plug in and "Automatically Sprayit" quickly, cheaply and effectively.

The Premier Model Automatic Sprayit is designed for use in areas from 12,000 to 50,000 square feet of floor space. It is a sturdy unit, direct connected for operating quietness, compactness and easy portability. It is powered by a high grade 1/4 H.P. repulsion induction motor. It is equipped with a one gallon glass material reservoir with float controlled mercury switch and can be set to operate continuously from one minute to one and a half hours without attention or stand-by service. A graduated scale mounted on the base makes it quick and easy to measure any amount of material to be atomized. Furnished with 110volt A.C. motor 60-cycle; other windings available at extra cost.



plants having compressed air throughout, the Model available. The insecticide reservoir is of one-gallon capac-The unit is furnished complete as illustrated with 50 ft. of hose and air regulator valve. If used with portable air compressor, mercury control switch can be furnished or if desired for air line serv ice, a magnetic valve control can be included.



Service Model





Utility Model

The Utility Model Automatic Sprayit is designed for application of standard insecticides in areas having from 6,000 to 12,000 square feet of floor space. It is equipped with a sturdy well-built direct connected motor compressor unit regularly furnished for use on 110-volt A.C. current. The insecticide reservoir is of one quart capacity with float-controlled mercury switch, and a graduated scale to measure any desired amount of liquid to be atomized. It can be set to operate continuously from one to twentyfive minutes without attention or stand-

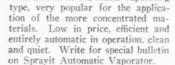
Furnished with 110-volt A.C. motor, 60 cycles; other windings available at

There Is a Sprayit for Every Purpose

The products herein described are not an overnight happening, but the result of an intensive, specialized, but broad experience, covering many years in the engineering and building of portable spray equipment for a wide range of

As specialists and leaders in this field we are naturally looked to by manufacturers, jobbers and distributors alike, not only as a dependable and direct source of supply, reliable and financially responsible, but as originators of the most modern, up-to-the-minute, efficient equipment at the lowest manufacturing costs possible.

The Electric Sprayit Co. SOUTH BEND, IND.



Sprayit Automatic Vaporator. This unit is of the steam vaporizing

Sprayit Vaporator

should be at least a beginning in removing the poor products from the market—in fact it may tend to raise the quality of all extracts offered to the trade.

Work Contemplated for the Future

I believe that every member of the Association who packs insecticides should send a quart of spray or a large can of powder to the Insecticide Committee so that a thorough survey can be worked out by its committee.

1-Styles of packages-that is

A-General survey of cans and bottles.

B-Types of cans.

C-Types of tops.

D—Number of colors, if lithographed. E—Number of colors—if paper label, etc.

2-The various labeling materials used on packages.

3—A survey of qualities without mentioning names, each being designated by a symbol.

A-Killing qualities of the insecticides.

B-Odor results.

C-Stain results.

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D-Lasting odor when sprayed.

4—A general recommendation on whatever the above survey may give us so that we can help our members to elevate standards and also clarify directions or assist in inaugurating better control over the industry as will possibly be our duty.

In collaboration with this committee your government is now making a survey of the insecticide business. A blank has been sent to each member with the request that he fill in his records of sales for the years 1930, 1931 and 1932. This will give us figures relative to advance or decline in business. No man, I believe, is narrow-minded enough to feel that he should not contribute these figures. We urge you to send in your confidential report. It should be most instructive to see your personal sales in comparison with the total sales of the industry from year to year.

In conclusion, the Insecticide Committee wishes to thank each of the Chairmen of the sub-committees and the committeemen for assisting the industry to properly analyze and control its problems more efficiently. At the December meeting we hope to have a more interesting report.

Report of Insecticide Standardization Section By N. J. Gothard

MEETING of the old Insecticide Standardization Commit-A tee was held in New York at the time of our annual meeting. At that time it was agreed that a standard sprayer would first have to be developed. After such standard sprayers were provided, cooperative testing would have to be done by the interested laboratories to determine how closely different laboratories would check when all were using identical sprayers. The question of a reference standard by which each laboratory could gauge the strength or resistance of its peculiar insects was then discussed. It was agreed that the present method of testing the flies against a highly refined straight run petroleum distillate was entirely unsatisfactory. It was agreed that a suitable reference standard would have to have a killing power in the neighborhood of normal insecticides and several means of obtaining such a reference standard were discussed. The investigation of these proposed standards was necessarily left to be developed later by cooperative work.

The matter of a standard sprayer for the test was taken up with the DeVilbiss Company of Toledo. This company agreed to investigate the situation. They concluded, first, that it would be impossible to obtain sprayers of ordinary commercial manufacture which would be sufficiently accurate for our purpose, but they further concluded that it would be possible for them to make a given number of sprayers, by special manufacture which could be guaranteed to deliver a given quantity of spray in a given time, of uniform drop size under a standard pressure. The DeVilbiss Company manufactured a model of the sprayer they proposed to make for us and this was submitted to several insecticide laboratories. In general it was agreed that the sprayer appeared to be satisfactory, assuming that the DeVilbiss Company could manufacture the required number all of which would be identical.

Tentative arrangements had been made with the DeVilbiss Company for the handling of orders for the standard sprayer to the effect that orders should be placed directly with the DeVilbiss Company, but this company stipulated that they would want to know how many sprayers would be required before they would start manufacture. In making arrangements with Mr. Cole to circularize the membership of the Association regarding the standard sprayer, through a misunderstanding, a bulletin was issued somewhat prematurely announcing the sprayer and to the effect that I would receive orders for the sprayer. This is not correct, since final arrangements have not been made with the DeVilbiss Company, but assuming that our tentative arrangements are agreed upon, orders will be placed directly with the DeVilbiss Company. However, when final arrangements are made, a definite announcement will be made to the members through a bulletin and members are asked not to place orders until they receive

It is a matter of regret that the development of a sprayer and the whole work of the Standardization Section has been so greatly delayed, and for this delay the chairman will assume the responsibility, but it is sincerely hoped that, once the standard sprayers are distributed, the work of standardization of the method will proceed more rapidly and to a definite conclusion.

It is the feeling of a few members of the Association, as expressed to me in correspondence, that the Beet-Grady method is not capable of being developed into a standard method. I think it has been amply shown by several years of experience in several laboratories that the method is reasonably accurate and reliable for comparative results purely within the individual laboratory. It is admitted that the method as at present set up is not satisfactory for a universal standard method, but it is our hope that we will be able to develop it into such a method.

Report of Insecticide Committee— Scientific Section By Charles H. Peet

YOUR Committee has gone carefully over the literature relating to insecticides which has appeared since the report submitted by this Committee at the Meeting of the I.D.M.A. in New York in December, 1932. We have again followed the procedure of dividing the published matter into three classes:

1. Those publications which have dealt with pyrethrum insecticides.

2. Those which dealt with Rotenone.

3. Various synthetic developments.

In presenting this report, I should like to acknowledge particularly the cooperation given by Dr. Lewis and Mr. Birdsall for their work in the preparation of the sections dealing with pyrethrum and Rotenone, respectively.

I-Pyrethrum

Some interest has been developing in other sources than Japan for the supply of pyrethrum. Jary reported in the Journal of the Southeastern Agri. College, Wye, Kent, England, that pyrethrum flowers grown experimentally in that locality contained as much as 0.5% pyrithrin I and 1.13% pyrethrin II. C. R. Guadinger has presented before the American Chemical Society data regarding pyrethrum grown in Colorado and in the various provinces of Dalmatia and these will doubtless be published in an early issue of Industrial and Engineering Chemistry.

Various publications have discussed the instability of the pyrethrins, notably under the influence of light, air and moisture. Gnadinger and Corl have described a process for the preparation of a pyrethrum extract by extraction with C₂H₁Cl₂ and have reported that extracts made by this method could be stored for 13 months without loss of strength. A patent has been issued to J. Guillissen in Great Britain for the storage in sealed vials (ampoules) of extracts of pyrethrum in ethyl lactate, pryidine or other solvents to prevent decomposition.

Ginsberg and Schmitt made a number of comparative tests on rotenone and pyrethrum with different insects and came to the conclusion that because an insecticide is toxic to one group of insects, it cannot be assumed that other insects will react the same way toward it. Similarly, H. H. Richardson compared the pyrethrins and rotenone with nicotine against the red spider. He

NO LOSS of Insecticide Efficiency



Presto Model 102 Spray Gun

Stresto Electric Spray Guns Allow Full Killing Power

IF repeat sales are desired, it is imperative that insecticides, disinfectants, and similar liquids be applied at maximum efficiency.

Your products have full killing power when used in Presto Electric Spray Guns.

The powerful spray reaches into far corners, and cracks around the floor. There is no loss of efficiency.



Presto Model 102 Electric Spray Gun Presto Model 88-94 Shoulder Strap

Because Presto Guns are faster, more efficient and more economical — thousands of them are used in hospitals, institutions, hotels, poultry houses, greenhouses, dairies grain mills, etc.

Presto Model 102 is a handy, general purpose unit. All electric. Light weight. Powerful spray.

Presto Model 88-94 shoulder strap spraying outfit is widely used in industrial plants and other larger jobs. 12-inch extension nozzle gives long reach. Any atomization. Any type liquid. Extra powerful spray, yet the two-unit arrangement makes this model easy and untiring to handle.

Send the coupon today for complete data.

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on everything of interest to manufacturers of soaps, disinfectants, polishes, insecticides and related sanitary products

Special articles ... markets ... news ... patents ... trademarks technical developments, etc.

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MacNAIR-DORLAND COMPANY

136 LIBERTY STREET NEW YORK found rotenone slightly more toxic to this mite than the pyrethrins (mixed) but both were more effective than nicotine. The wetting agent used in these tests also played an important role in the effectiveness of the spray.

A British patent has been issued to the W. T. Rawleigh Co. for an insecticide obtained by macerating and percolating pyrethrum flowers with kerosene, naphtha, etc. and M. B. Hopkins (Standard Oil Development Co.) has obtained a U. S. patent upon a method for extracting pyrethrum flowers with petroleum ether under pressure followed by mixing with kerosene and removal of the petroleum ether by distillation. H. H. Richardson has reported that those petroleum distillates which were most effective insecticidally by themselves, gave the most effective extracts of pyrethrum.

Cattanach has received a Canadian patent covering a kerosene extract of pyrethrum mixed with tallow, cocoanut oil, potassium hydroxide and methyl acetate.

The fallacy of estimating the insecticidal value of pyrethrum flowers by the amount of resin extracted is demonstrated by the experiments of R. Neu who obtained the following amounts of extractive material from aliquots of the same flowers:

Acetone
Alcohol (denatured)20.55%
Ether 4.29%
Petroleum ether 4.91%
Benzene 8.45%
Chloroform 8.31%
Carbon tetrachloride 5.09%
C ₂ HCl ₃ 11.90%
Ethyl acetate 7.86%
Methyl alcohol22.71%

Perhaps the most fundamental work during the period covered by this report is that of Wilcoxon and Hartzell on the chemistry and toxicology of pyrethrum

A method is described for obtaining samples of the pyrethrins free from accompanying impurities, which is simpler than methods described previously, and which does not require the conversion of the pyrethrins into a derivative, and their subsequent regeneration.

In the course of this work samples have been obtained differing widely in the ratio of pyrethrin I to II. Toxicity tests using these samples on Aphis rumicus indicated that I is far more toxic than II. This is especially interesting on account of its bearing upon methods for the quantitative estimation of the effective strength of pyrethrum flowers or extracts. In their earliest work, Tattersfield and his collaborators stated that pyrethrin I is approximately ten times as toxic as pyrethrin II. Later, Guadinger and Corl stated that the two pyrethrins are of about the same toxicity. The agreement between Tattersfield's early work and this recent work by Wilcoxon and Hartzell points to a definite difference in toxicity.

Comparative toxicity tests using purified extracts and comparing these with crude extracts of flowers, at the same concentration of pyrethrin I, showed the flowers to be slightly more toxic than the highly purified extracts. Possible reasons for this difference are suggested.

II-Rotenone

A great deal has been published regarding rotenone and various rotenone-bearing roots but the majority of these publications allude exclusively to agricultural testing. Some mention of a few of these agricultural papers will be included because they record comparative results of nicotine, pyrethrins and rotenone and therefore will be of interest to members of this Association.

The December, 1932, issue of the Journal of Economic Entomology contains three interesting reports, viz: "Notes on Rotenone as an Insecticide" by Neely Turner, in which Mr. Turner gives some very interesting comparisons of the efficiency of rotenone with that of arsenic of lead and nicotine. In this same issue there is an article entitled "The Relative Toxicity of Pyrethrins and Rotenone as Fly Spray Ingredients" by C. B. Gnadinger and C. S. Corl. This article covers testings of various mixtures of the two ingredients as well as each individually, and presents results showing that an oil solution of rotenone was considerably less toxic to flies than a pyrethrin solution of the same concentration. This article also states that the addition of smaller amounts of rotenone to oil solutions of pyrethrins do



THE rubber heels on your shoes absorb the shocks and jars. For most purposes rubber is chosen for its resiliency—its shock resisting qualities.

So the popular Metso, sodium metasilicate is preferred by compounders of cleansers for its ability to resist shocks or in other words, changes in pH values. This is known as buffering action.

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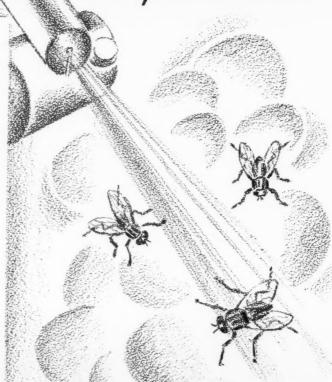
PERFUMES

Honeysuckle

Cedar Pine Trefle

Orange Blossom

The above represent latest researches.



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not increase the toxicity as much as the addition of the same amount of pyrethrins. The third article in this same issue, entitled "Derris Now Produced and Used on a Large Scale" by R. C. Roark, not only deals with the statistics available of the cultivation of Derris Root, and the acreage now in growth in different countries, but also brings out the fact that this production of Derris Root is the equivalent in toxicity of almost 20 times its weight in tobacco and over 21/2 times its weight in pyrethrum flowers.

It also quotes an English publication, stating that 10,000 head of cattle on nearly 500 farms in England were freed of warbles by the use of a Derris wash consisting of a standardized Derris Powder 1/2 lb., soft soap 1/4 lb. and water i Imperial gallon.

A pamphlet published by the U. S. Dept. of Agriculture, Bureau of Entomology, "Review of Information on the Insecticidal Value of Rotenone," by F. L. Campbell, was published in booklet form May, 1932. It contains a great many things of interest, including some results on house flies and moths. It contains paragraphs on the toxicity of rotenone to a great many insects and also some very interesting results using rotenone dissolved in acetone and added to diluted condensed milk or to a dilute solution of molasses. Cotton was saturated with this material and exposed in Petrie dishes to flies. The results were very pleasing. This booklet contains a paragraph on the repellent effect, paragraph on the discussion of toxicology, several paragraphs on the value of rotenone for plant protection, discusses rotenone as an aphicide, rotenone as an acaricide and rotenone for the control of insect pests on animals.

The analytical edition of "Insecticidal Engineering & Chem-January 15, 1933, contained an article by Howard A. Jones and Chas. M. Smith. Insecticide Division, Bureau of Chemistry & Soils, U. S. Dept. of Agriculture, "A Color Test for Rotenone." The same edition contained an article by Howard A. Jones, "Assay of Plant Material for its Rotenone Content." This publication is worthy of review by all interested manufacturers because it gives them clearly a method of checking any

purchases they might make.

The April, 1933, issue of the Journal of Economic Entomology contains an article by Howard A. Jones, W. A. Gersdorff and E. L. Gooden, "Loss in Toxicity of Deposits of Rotenone and Related Materials to Light." The interesting development of this article is that by certain treatments rotenone may be preserved and remain active longer when exposed to direct ultraviolet rays.

The June issue of Industrial and Engineering Chemistry will contain an article, "Rotenone," by R. C. Roark, Insecticide Division, Bureau of Chemistry and Soils. This article is a complete resume up to date, not only giving the properties of rotenone, the cultivation of Derris, the method of assaying of plant material for its rotenone content, toxicology of rotenone, but also the comparative insecticidal efficacy of rotenone, nicotine and the pyrethrins. This issue will also contain an article by R. W. Birdsall, Derris, Inc., "The Commercial Aspect of Rotenone and Its Future Possibilities." This paper reviews the commercial angle of buying, shipping, sources of supply, sampling, grinding, crating, extraction-in other words, a picture of the commercial manufacture of all derivatives. It gives an outline of the uses of various derivatives and states that rotenone-pyrethrum concentrate is unquestionably an improvement over the ordinary straight pyrethrum concentrate heretofore used in manufacturing household sprays. It disputes the article published by Gnadinger and Corl in the Journal of Economic Entomology, December 1932 issue, the inference being that these tests were conducted in such a way as to lead to the belief that there was little or no rotenone present in their solutions at the time of spraying or that the rotenone present was in process of crystallization, dispersed in such large particles that it had no efficiency in the liquid spray. This paper states that scientific research has proved that rotenone can be held in solution in hydrocarbon oils and that rotenone does improve the usual pyrethrum spray. It includes a table showing the efficiency of rotenone-pyrethrum combinations by the Peet-Grady method, giving its efficiency in various dilutions-a range from 64% kill to 92% kill. This table proves that when combination concentrates are over-diluted the kill does not decrease in direct proportion to the decrease in toxic content. It also states that the cost per finished spray gallon, using the combination concentrates, is directly competitive with the cost per finished spray gallon using the best pyrethrum



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concentrates now on the market. It reviews the keeping qualities of Derris products and the health hazard and also states that rotenone properly held in solution in hydrocarbon oils to the extend of 1/10 of 1% will give a kill of 65/70% of the Peet-Grady method.

Patents on Rotenone

Dennis (U. S. Patent Re. 18,667; appl. Feb. 25, 1929; orig. No. 1,621,240, March 15, 1927, appl. April 16, 1923) has secured a reissue of his original patent 1,621,240 covering the use of cube extract as an insecticide.

Georgi and Teik (Malayan Agri. J. 20:498-507, 1932) have reported that *Derris elliptica* contains more rotenone than *D. malaccensis*. A sample *D. polyantha* was found to contain about 3 per cent rotenone and 13 per cent total ether extract. There was no correlation between the amount of rotenone and the ether extract. Dried fine roots of *D. malaccensis* showed no loss in account of total ether extract after 3 months' storage.

GINSBURG (J. Econ. Ent. 25: 918-922, 1932) reports that both rotenone and derris extract are much more toxic to aphids than

Haac (J. Pharmacol, and Expt. Ther. 43 (1): 1932-208 (1931) and a letter addressed to R. C. Roark, Feb. 21, 1933) has made careful tests with rotenone upon guinea-pigs, rabbits, dogs, cats, pigeons, white rats and other animals. Haag concludes from his studies that there is little danger of acute intoxication in healthy subjects following the ingestion of food that has been sprayed with rotenone. Doctor Haag was so convinced of the harmlessness of rotenone that he swallowed 2.3 grains of it without suffering harmful effects.

HOUBEN in Germany (Anz. Schadlingskunde 8(7): 83-88, 1932), ROBERTSON in England (J. Chem. Soc. (London), 1380-1388, 1932), and REICHSTEIN and HIRT (Helvetica Chem. Acta., 16: 121-129, 1933) are endeavoring to synthesize rotenone and rotenone derivatives.

MARLATT (U. S. Dept. Agr., Bur. Ent. Ann. Rpt. 1932, 38 pp.) has stated "Comparative tests of alcoholic solutions of the pyrethrins and rotenone showed that the former has a more rapid effect on houseflies, but that the insecticidal value of the latter is greater."

MILSUM (Malayan Agr. J. 20 (11): 582, 1932) has reported that it is possible to grow derris from seeds as well as from cuttings. The propagation of derris from seeds opens up the possibility of producing varieties of high toxic content.

RICHARDSON (J. Econ. Ent., 25: 592-599, 1932) has reported that rotenone is more toxic than nicotine and the pyrethrins when tested against the greenhouse red spider mite.

ROARK (J. Econ. Ent., June, 1933) has listed the following plants that have been found to contain rotenone: Cracca (Tephrosia), Derris, Lonchocarpus, Millettia, Mundulea and Ormocarpum. All of these, except Cracca virginiana (devil's shoestring) are tropical plants.

STANDARD OIL DEVELOPMENT Co. (Brit. Patent 350,897, accepted June 15, 1931; applied for Feb. 15, 1930) has obtained a British patent covering the use of petroleum white oil together with an extract of *Derris, Lonchocarpus, Tephrosia* or *Pyrethrum*, and an emulsifying agent.

III—Synthetic Insecticides

The literature reports much less work in this line than was done during the preceding year. Very few references have appeared regarding strictly synthetic developments, though there have been a number of references to the use of previously known compounds in insect control.

The unsaturated hydrocarbons extracted from petroleum by SO₂, either with or without the addition of pyrethrum extract, have been patented as insecticides by the Standard Oil Development Co.

British and German patents have been issued to the Rohm & Haas Co., Inc., covering the use of organic thiocyanates as insecticides.

DeVuyst has obtained a Belgian patent covering a mixture of benzine, paraffin, para dichlorobenzene, ortho dichlorobenzene and carbon tetrachloride.

In developing a cockroach bait, A. C. Cole, Jr., found most essential oils were repellent to this insect but oil of sweet

(Turn to Page 99)



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Bouquets that actually perfume your products . . . new . . . interesting!

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Quick - Positive - Safe

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Submit Food and Drug Act Revision

A proposed draft revising the Federal Food and Drug Act, prepared by the U. S. Department of Agriculture and approved by the Department of Justice, has been submitted to Agriculture Committees in the U. S. Senata and House. An important provision is the expansion of the Act to include cosmetics and to regulate advertising of food, drugs and cosmetics. Advertising will not be censored in advance, but false advertising may be penalized by prosecution. Restrictions against adulteration have been strengthened, and labeling requirements have been broadened. Power to require manufacturers to secure Federal permits to operate are granted to the Secretary of Agriculture for use in cases where the public health is concerned.

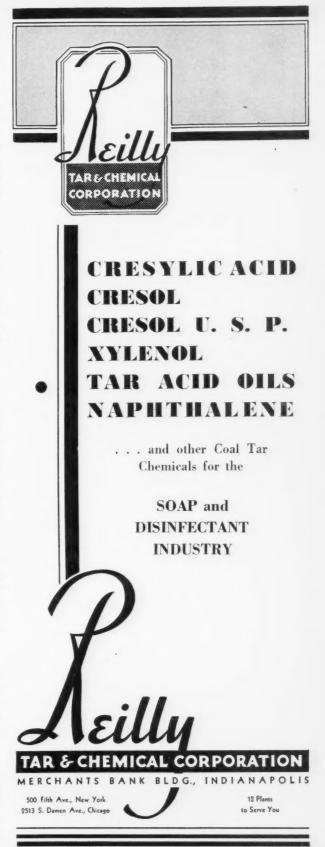
Max Katzman of Kaz Manufacturing Co., New York, has been awarded priority of invention in the manufacture of electric vaporizers by the U. S. Court of Customs and Patent Appeals, in litigation against Nicholas Lawner, assignor of the American Sundries Co., Brooklyn. The decision, written by Justice Irving L. Lenroot, affirmed the previous decisions of the Board of Appeals of the U. S. Patent Office and the Examiner of Interference.

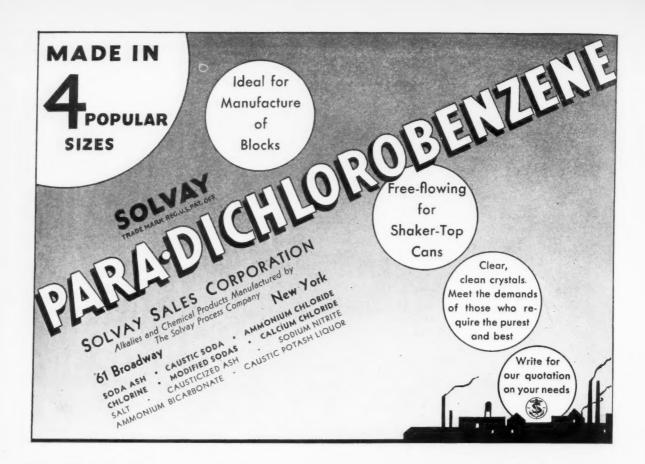
W. F. Plowfield, sales manager for the specialty division of Manning, Bowmann & Co., Meriden, Conn., who are manufacturing a new type steam insecticide vaporizer, has requested that it be announced that he has no connection with any insecticide company or with any company or individual bearing the same name as himself. Some years ago, Mr. Plowfield was head of the firm which manufactured *Flyosan*, which product is now owned and manufactured by William Peterman, Inc.. New York.

J. K. Stewart, director of industrial naphtha research for Anderson-Prichard Oil Corp., Oklahoma City, Okla., advises that their research division has been moved to larger quarters at 3921 East Ravenswood Ave., Chicago. For the past year, Mr. Stewart has been particularly concerned with the study of a hydrocarbon oil base for insecticides.

Testimony was taken in New York, May 29, in the action of the U. S. Federal Trade Commission against Miracul Wax Co., St. Louis, on the basis of alleged misrepresentation in the sale of floor polish. William C. Reeves acted as trial examiner and Alfred M. Craven as attorney for the Commission.

The Japanese pyrethrum crop will total about 15,000,000 pounds for 1933, according to unofficial estimates. The new Pyrethrum Association, formed last fall in Hokkaido, is expected to be more of a factor in the market this year. It does not engage in the sale of flowers, but regulates production and sets selling prices.





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For Fly Sprays
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manufacturers of insecticides.

Calcyanide Co., New York, has recently introduced a new and compact portable fumigating unit called the "Calcynator". It is described in a booklet which can be obtained by addressing the company at 60 East 42nd St., N. Y.

In our May issue it was stated in error that P. C. Reilly, president of Reilly Tar & Chemical Corp., was president of American Creosoting Co. Mr. Reilly is not connected with the latter company, but is president of Republic Creosoting Co.

Synthetic Insecticides

(From Page 95)

orange, pineapple, apple, dilute peppermint, dilute wintergreen, sassafrass, nutmeg and banana were attractive. The formula which he developed consists of 6 g. of gelatin dissolved in 200 cc. of beef broth containing 0.5 g. of HgCl₂ and one drop of oil of banana, sweet orange, apple or pineapple.

Report of Disinfectant Committee By Samuel H. Bell

THE Disinfectant Committee has carried on considerable correspondence during the past six months on subjects relating to our industry. Recently a meeting of the General Committee has been held.

You will hear the reports of the subcommittees except that of the Scientific Committee. Their report will be submitted at the annual meeting in December as is the custom.

The General Committee has several recommendations to make to the association. The action on these recommendations should be taken after the reports of the subcommittees have been heard.

We recommend that the association adopt the F.D.A. methods of testing the Phenol Coefficients of disinfectants as the officially recognized testing methods of this Association. Your committee believes that this action should be taken at the present sessions.

Further, in connection with the testing of the Phenol Coefficients of disinfectants, it is recommended that we officially offer our cooperation as an Association to the proper authorities of the Food and Drug Administration in developing and studying testing methods wherever such work is needed.

The Nomanclature Committee will submit a report, and it is recommended that this Committee continue its work in conjunction with the Scientific Committee in preparing proper definitions of terms and words. The Committee believes that these definitions can be prepared by members of our organization without the employment of a lexicographer. These definitions, when properly agreed upon by the committee, will be published to the trade generally and specially to consumers and buyers.

Report on Standardization of Disinfectants By William Dreyfus

A S Chairman of your Committee I have presented to you in the past some informative data on the three most commonly used Bacteriological Methods for testing disinfectants sold by members of our Association and other manufacturers in interstate commerce and which thereby become subject to official control by the Food and Drug Administration of the United States Department of Agriculture in Washington.

Frequently during the year the commercial representatives, such as managers and salesmen, of a manufacturer of disinfectants present to the technical staff questions put to them by customers or prospects inquiring why they should purchase certain products in preference to those which the competitors' salesmen offer either at a cheaper price or with claims by "word of mouth only" to possess much higher disinfecting value.

This illustrates to you, Gentlemen, the necessity of marketing your products with a guaranteed coefficiency on the face of the label so that you could then answer such questions, which probably are also presented to you in the course of time, in the same manner as I do; namely: The guaranteed coefficient on the label is not a mere formality but represents a guarantee of the manufacturer to the purchaser of the true value of the product he



DISINFECTANTS

COAL TAR DISINFECTANTS

(Emulsion types - Coefficients 2-20)

SOLUBLE CRESOL DISINFECTANTS

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Accurate technical control by yraduate chemists

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Why guess or be in doubt? You have at your disposal a medium for purchasing insecticides on an intelligent basis.

Entomological testing by the Peet-Grady method, and chemical examination of insecticides are now available.

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Phosphorus Paste is also an effective exterminator of water bugs and roaches.

There is no fire hazard connected with the use of our Phosphorus Paste.

It is a standardized product that is exceptionally smooth and consistently uniform.

Sold in 10, 25, 50 and 100 pound pails.

POISON GRAINS

Effective and economical exterminators of mice.

Poison Rye (colored green) Poison Oats (colored blue) Poison Wheat (colored red)
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Mixed Poison Grains (colored four seed mixture) Packed in 10, 25, 50 and 100 pound drums.

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SOAP FLAKES! The "JAY BEE" makes a fine, uniform powder, grinding without heat

GRINDS Roots—Herbs—Barks—Seeds—Leaves—Spices—Nuts—Chemicals—of all kinds—Tobacco leaves and stems! The "JAY BEE" grinds everything fine, fast, cool, uniform at a lower cost per ton than any other grinder made.

Sturdy steel construction, built to last a lifetime. "JAY BEE" mills are complete and compact. Require small space. Sizes and styles to meet every grinding requirement: 2 H. P. to 100 H. P. with belt, V-belt and direct-connected drives.

Write for descriptive literature. Submit your grinding prob-lems. Send us samples of any material you want ground.

The World's Greatest Grinder Manufactured by The Bossert Corp., Utica, N. Y. The World's Largest Builders of Hammer Mills Used by the largest plants in the industry. J. B. SEDBERRY, Inc., 140 Hickory St., Utica, N.Y. offers for sale, because these statements on the label are continually checked by the Government in Washington and, therefore, must be truthful.

Your Committee, therefore, undertook a series of investigations by different Laboratories on four types of disinfectants; i. e., a medium and a high testing coal tar disinfectant, a technical cresol compound disinfectant and a pine oil disinfectant, intending to show the results obtained by different investigators under the F.D.A. Method, the Hylab Method and the Rideal-Walker (1921) Method. Unfortunately the amount of work involved did not enable us to carry the investigation to a final issue by the time of the Mid-Summer Meeting and, therefore, it will not be possible until the Annual Meeting to present a more definite report.

However, I am in a position to give you in the meantime some comparative conclusions on the results between the Hylab and the F.D.A. Methods based on an investigation I had made by the Pease Laboratories sometime ago on various different types of disinfectants

VI. While the F.D.A. Method is reported to yield results about the same as the Hylab, limited experience indicates slightly lower results on the average by the F.D.A. Method, although this may not be apparent in the case of the average of a few tests on one product due to normal experimental variations.

2. The Hylab Method bases the coefficient on relative germicidal action at three time periods 5, 10, 15 minutes in place of one time period of 10 minutes in the F.D.A. Method. This appears a more satisfactory practical measure of the germicidal strength of varying types of disinfectants. There exists a much wider chance for variations with the Hylab Method than with the F.D.A. Method between different Laboratories, because with the F.D.A. Method the procedure of the test is definitely fixed, whereas with the Hylab Method a few phases of technique are left open to the individual judgment of each Laboratory.

Some of these variations referred to above, which are possible in the Hylab Method and much less liable in the F.D.A. Method are caused by the following reasons:

(A) pH of the Media Hylab—"Unadjusted but should be between 6.0 and 7.0", whereas F.D.A. fixes media at pH 6.8.

(B) Resistance of culture fixed in F.D.A., but no definite limits as to resistance to phenol stated in Hylab.

(C) Methods of handling culture given more definitely in F.D.A. Method.

However, if two different Laboratories use identically the same procedure of the Hylab Method by mutual agreement it seems there should be little chance for variations and a decidedly better practical picture of germicidal efficiency is obtained by the Hylab Method.

3—For purposes of comparing disinfectants in the trade and for controlling manufacture, a more precise method is needed than for the purpose of determining proper labelling directions for effective dilution. The Hylab Method by permitting an average of three observations at three points in the curve for each test offers a better opportunity for accuracy. It will be seen that three individual tests by the F.D.A. Method means three observations to be averaged so that individual variations in each test due to experimental error will have a far greater weight on the average than would be the case with a series of three Hylab tests on the same material. Here, nine observations could be averaged and obviously increased precision obtained. Thus for control work and for comparing disinfectants on a basis where significance can be attached to smaller differences the Hylab Method would appear to have the advantage.

Another point, on which we hope to do some work is the question as to whether it is possible that on some disinfectants under certain conditions a low coefficient can be obtained with a weak culture (toward phenol), contrary to the usually accepted idea that a weak culture (toward phenol) invariably involves a high coefficient. Some preliminary evidence along this line has already been obtained and it will be interesting to check this matter further.

In conclusion I wish to emphasize as Mr. Burton G. Philbrick of Skinner & Sherman, Inc., Boston, has kindly consented some time ago as member of this Committee to cooperate by carrying out actual tests in the proposed investigation already started by the Pease Laboratories we should have definite results by two or three different Laboratories, working on identically the same samples, to present to you at the Annual Meeting in December.



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A master soap maker, 52 years' experience all kinds of potash and soda soaps, also face and shaving creams, toilet and shampoo soaps, will send formulas with detail instructions and short cuts easy and practical at a reasonable price. References supplied. Address Box 222, care Soap.

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Chemist: Long practical experience in finishing textiles, and in the manufacture of textile oils, softeners, etc., and their application. Address Box 217, care Soap.

CLEANING POWDERS

Supply the kind your trade wants . . . insure repeat orders

Let us make up your CLEANING POWDERS using your own names and labels.

Build up the business on your own brand.

Special formulas developed.

Write for further details

KEMIKO MFG. CO.

187 Murray St.

Newark, N. J.



IF you have a packaging problem that demands immediate attention, your telephone will put you in instant touch with your local Sefton sales representative, whose name is listed in the yellow pages of your telephone directory. Sefton Fibre Cans are available in a variety of styles, shapes and sizes and are made to fit individual specifications.

Write or wire

SEFTON NATIONAL FIBRE CAN CO. 3207 Big Bend Road, Maplewood, Saint Louis, Missouri

SEFTON CANS

COLORS

SOAP GREEN No. 4322

is a color you will be pleased with. It produces a real green shade, and is fast.

Ask for sample

INTERSTATE COLOR CO., INC.

Suite 718-C, 5 Beekman Street NEW YORK CITY

High Grade Specialty Products

For the Wholesale Trade

*BORITE POWDER No. 60

U. S. Reg. Trade Mark

An ideal mild powder for laundry work and water softening purposes. Also Borite No. 54 for dairies and bottlers. We particularly invite your attention to Borite No. 90 for metal cleaning.

*NEUTROLITE BOILER TREATMENT

U. S. Reg. Trade Mark

An active reagent for neutralizing acidity and hardness in boiler feed water. The ideal boiler compound, a uniformly effective scale remover and retarder.

*These are the marks of our manufacture. They assure you of uniformity and excellence.

MILWAUKEE CHEMICAL CO., INC.

204 N. Broadway St.

Milwaukee, Wis.

Manufacturers of chemical products for the wholesale trade

PYRETHRUM

POWDERED

Years of experience and long established selective buying contacts insure the high quality of McCormick's Pyrethrum.

A close examination of McCormick's Powdered Pyrethrum will clearly show uniformly fine particles due to the air flotation process.

GRANULATED

Analytical and biological tests guarantee the high toxic quality of McCormick's Pyrethrum.

So that the toxic content may be efficiently extracted, all the achenes are broken up in McCormick's granulated Pyrethrum. This allows maximum extraction.

CONCENTRATED OIL EXTRACTS

Expert supervision of rigidly controlled methods insures known killing power in McCormick's Pyrethrum.

The base for McCormick's Oil Extract is a Petroleum Oil that has been refined to complete freedom from any kerosene odor.

Standardized Liquid and Dust Pyrethrum Insecticides

McCORMICK & CO., Inc.

BALTIMORE, MARYLAND

STEEL DRUMS

That are built to last!



30-55-110 gal. sizes

The BEST
Containers for
LIQUID SOAPS
DISINFECTANTS
CLEANSERS
ESSENTIAL
OILS
VEGETABLE
OILS
CHEMICALS
GLYCERIN
ETC.

Black, Galvanized, Tinned

Sturdy and long lasting, the Trageser heavy duty steel drum will be carrying your materials to market long after cheap containers have found the junk pile. Order a sample drum.

JOHN TRAGESER STEAM COPPER WORKS GRAND STREET MASPETH, L. I., N. Y.

Special tanks, tubs, pails, etc.

Superintendent—Can make and analyze all kinds of soap and soap materials. Address Box 215, care *Soap*.

Chemical Engineer, Soapmaker and Plant Superintendent. Practical experience in boiled and semiboiled soaps. Three years in Spanish speaking country. Address Box 216, care Soap.

Chemist, B. S., 25 years, single, three years experience with all kinds of specialties, especially automobile and furniture polishes and related preparations. Development and research as well as buying and factory management; abrasives and their suspension soaps, and cleaners. Address Box 222, care *Soap*.

Positions Open

Wanted: Experienced man to superintend plant making liquid and oil soaps, scrubbing soaps, etc. Also knowledge disinfectants, etc. Give details of experience, etc. Write to Box 225, care Soap.

Wanted:—Face cream expert. Must be experienced, practical man who has specialized in manufacture of high quality face creams, lotions, and beauty treatment lines. Please give full details and state salary in your reply, which will be held strictly confidential. Address: Secretary, Lambert & Feasley, Inc., 400 Madison Ave., New York, N. Y.

Wanted: experienced Kettle man. State age, experience and salary required. Address Box 214, care *Soap*..

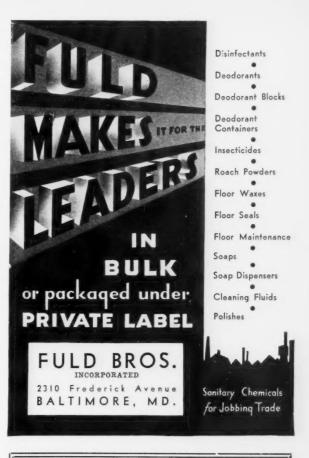
Salesman—To handle line of liquid deodorizing specialties and equipment for building and household use, now stocked by leading New York stores. Also line of moth products. Communicate with Box 224, care Soap.

Distributors Wanted—Low priced mops for the janitor supply trade in middle and western states. Address Southern Chemical Co., Greensboro, N. C.

Representation Wanted: Old established manufacturer of quality soaps and polishes, wants sales representatives in important cities to supplement present mail orders business by direct contact. Excellent opportunity for experienced salesmen, commission basis, or energetic distributing organization with few related lines. Give full experience and present lines carried. Address Box 201, car *Soap*.

Miscellaneous

For Sale: Used wooden kegs as good as new. Tight, well coopered. Suitable for packing soap powder, soap flakes, and cleanser, cheap. Address Box 218, care *Soap*.



REMOVAL SALESoap Machinery Specials

- 1-5 Roller Steel Mill.
- 1-8" H.A. Plodder.
- 1-Ralston Power Soap Press.
- 4—Watercooled three Roller Mills. Sargent Soap Chip Dryer.
- 12-1200 lb. Frames.
 - 1-Colton Tube Filler.
- 2-Foot Para Block and Soap Presses.
- 1-Houchin Amalgamator.
- 3-Dopp and Houchin Vertical Crute ers.
- 1-1500 lb. Horizontal Crutcher.
- 3-Granite Stone Mills, 3 and 4 rolls.
- 1-Simplex Soap Powder Grinder.

Cutting Tables, Slabbers, Kettles, Pumps, Tanks, Filter Presses, Wrapping Machines, Tube Fillers, Closers, Crimpers, Dry Powder Mixers, etc.

Send for Complete List (Bulletin No. 10)

We buy and sell from single items to complete plants.

Stein-Brill Corporation

183 Varick Street

Phone: WAlker 5-6892-3-4 New York, N. Y.
Cable Address:
"BRISTEN"

KLEENWELL SELF POLISHING WAX

The sensational, new liquid wax that dries hard and bright in fifteen minutes without polishing. Now available to the jobbing trade under your private label or under our own label. Kleenwell liquid gloss wax may be sold to your customers on a money-back guarantee—we stand back of the guarantee.

APPROVAL

Has been given Kleenwell Liquid Gloss Wax by leading linoleum, rubber and composition floor manufacturers.

Our direct national advertising campaign will obtain many leads for you. These leads will be given to our authorized jobbers. Your name on the margin of this ad will bring you a free sample together with the details of our proposition.

CHICAGO SANITARY PRODUCTS CO.

2526 W. Congress St.,

CHICAGO, ILL.

Bulk Metal Polish

for the jobbing trade

BIG PRODUCTION—LOW COST!

That is the reason jobbers all over the country are finding it profitable to stock SOLSHINE polish-that and our years of experience in manufacture, guaranteeing a product that will satisfy your customers and build repeat business. You can buy a better metal polish from us than you can manufacture in limited quantity and you can save money into the bargain SOL-SHINE polishes do not scratch or separate and clean as well as polish. We supply either paste or liquid and pack both in everything from a one gallon can to 55 gallon drums. Let SOLSHINE act as your own metal polish plant.

Try it at our expense. Ask for a sample can and new low bulk prices.

SOLSHINE MFG. CO.

Established 1897

17 CALDWELL STREET, BOSTON, MASS.

found money

If you are not using Vioflor you are throwing away 40% to 70% of your cost for perfuming insecticides, naphthas, polishes, inks, para-blocks, etc....

Without changing the odor effect now in your product!

It takes but a few minutes to demonstrate this.

Allow us to submit samples and further details.

Manufactured by CREPIN & DOUMIN, Ltd., London, England

Sold in the United States and Canada by

JOHN POWELL & CO., Inc. 114 East 32nd Street :: New York, N. Y.



ERTEL ASBESTOS DISC FILTERS

Especially suitable for filtering insecticides, light liquid soaps, polishes, toilet preparations, moth sprays, etc. Tell us what your problem is and let us work on it without obligation.



Note the handy grip, an exclusive feature of the Ertel Mixer, which makes it truly portable.

Made in all sizes to meet your mixing requirements. A recent report from Moscow has revealed the great scarcity of fats in the Soviet Union, and for the first time facts are given regarding the extraction of fats from cats and dogs to be used in the manufacture of soaps. Toilet soaps made from such fats have proved inferior, and now steps are being taken to provide suitable substitutes for the crude animal fats. Oily acids for soap making and artificial tallow are going to be manufactured from oil waste at works now being constructed at Gorki, the former Nijni Novgorod.

Solvay Process Co., Syracuse, N. Y., is reported to have made several increases in production recently, reflecting general increased industrial activity in the past few weeks.

English soap and toiletry manufacturers are interesting themselves in "British Shopping Week" which will be held in September in Helsingfors, Viborg and other important towns of Finland. With the possibility that a new trade agreement will be drawn up between England and Finland British manufacturers are looking for new markets in that country.

Magnus, Mabee & Reynard, Inc., New York, have just issued their catalog and price list for May-June, 1933.

Hercules Powder Co., Wilmington, has a booklet, "The Growth of a Modern Hercules", commemorating the twentieth anniversary of the company in business.

for low cost in para block manufacture



These two practical machines are all you need to produce high quality para blocks or cakes. The small machine on the left will thoroughly mix all ingredients. The large machine on the right will compress the mixture into any shape dies can give.

In addition, the mixer can be used on other dry products such as roach powder, cleansers, bath salts, etc. It will also give a smooth, soft and velvety texture to creams.

The hand lever press has more power than cheap foot presses. Inexperienced operators can rapidly turn out fine looking blocks. Send us some of your material and let us show you some specimen cakes. The press will save from 5% to 10% over the hot process.



259 46th St., Brooklyn, N. Y.

Makers of Good Soap Machinery for Forty Years



TRISODIUM DISODIUM PHOSPHATES

PREFERRED for their colorless crystals, uniform size and sparkling appearance. Prompt deliveries made from convenient distributing points. Packed in 325-pound paper-lined barrels and paper-lined kegs. Also in bags.

BOWKER

CHEMICAL COMPANY 419 Fourth Ave., New York City

We Manufacture

For The Trade ONLY

Liquid Soap Base
Auto Soaps
Potash Oil Soap
Shampoo
U.S.P. Cresol Compound
Coal Tar Disinfectants
Liquid Soap
Pine Oil Soap
U.S.P. Green Soap
Shampoo Base
Pine Oil Disinfectants
Insecticides

Ask for samples of these specialty bulk products

HARLEY SOAP CO.

2852 E. Pacific St.

Philadelphia

Where to buy

RAW MATERIALS AND EQUIPMENT

for the Manufacture of Soaps and Sanitary Products

NOTE: This is a classified list of the companies which advertise regularly in Soap. It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, etc., in which you are particularly interested. Refer to the Index to Advertisements, on the following pages, for page numbers. "Say you saw it in SOAP."

ALKALIES

American Cyanamid & Chemical Corp.
Columbia Alkali Co.
Hooker Electrochemical Co.
Niagara Alkali Co.
Solvay Sales Corp.
Stauffer Chemical Co.
Warner Chemical Co.
Welch, Holme & Clark Co.

AROMATIC CHEMICALS

Dodge & Olcott Co.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co.
Felton Chemical Co.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Maybee & Reynard, Inc.
Monsanto Chemical Works
Naugatuck Chemical Co.
Newport Chemical Works
Sherka Chemical Co.
Solvay Sales Corp.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

BULK AND PRIVATE BRAND PRODUCTS

Baird & McGuire, Inc.
Chemical Supply Co.
Chicago Sanitary Products Co.
Clifton Chemical Co.
Davies-Young Soap Co.
Eagle Soap Corp.
Fuld Bros.
Harley Soap Co.
J. L. Hopkins & Co.
Hull Co.
Kemiko Mfg. Co.
Koppers Products Co.
Kranich Soap Co.
Milwaukee Chemical Co.
National Oil Products Co.
Palmer Co.
Philadelphia Quartz Co.
John Powell & Co.
Geo. A. Schmidt & Co.
Sennewald Drug Co.
Solshine Mfg. Co.
Stevens Soap Corp.
U. S. Sanitary Specialties Corp.
White Tar Co.
Windsor Wax Co.

CHEMICALS

American Cyanamid & Chemical Corp. Bowker Chemical Co. Columbia Alkali Co. E. I. du Pont de Nemours & Co. General Chemical Co. Grasselli Chemical Co. Hooker Electrochemical Co. Industrial Chemical Sales Co. Mechling Bros. Chemical Co. Mechling Bros. Chemical Co. Monsanto Chemical Works Newport Chemical Works Niagara Alkali Co. Philadelphia Quartz Co. Solvay Sales Corp. Standard Silicate Co. Stauffer Chemical Co. Swann Chemical Co. Victor Chemical Works Warner Chemical Co. Welch, Holme & Clark Co.

COAL TAR RAW MATERIALS

(Cresylic Acid, Tar Acid oil, etc.)

American Cyanamid & Chemical Corp. Baird & McGuire, Inc. Barrett Co. Koppers Products Co. Monsanto Chemical Works Reilly Tar & Chemical Co. White Tar Co.

CONTAINERS

Cin-Made Corp. (Fibre Cans)
Cleveland Container Co. (Fibre Cans)
Continental Can Co. (Tin Cans)
Maryland Glass Corp. (Bottles)
Metal Package Corp. (Tin Cans)
Owens-Illinois Glass Co. (Bottles)
Sefton National Fibre Can Co. (Fibre Cans)
William Vogel & Bros. (Tin Cans)

DEODORIZING BLOCK HOLDERS

Clifton Chemical Co.
Eagle Soap Corp.
Fuld Bros.
Palmer Co.
U. S. Sanitary Specialties Corp.
William Vogel & Bro.

ESSENTIAL OILS

Dodge & Olcott Co.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
Leghorn Trading Co.
Magnus, Maybee & Reynard, Inc.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

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Consulting Chemists and Engineers

Specializing in Soaps, Disinfectants, Insecticides, Polishes, Etc.

FOSTER D. SNELL, INC.

Chemists-Engineers

A technical organization offering complete consulting, research, operating and management service.

305 Washington Street Brooklyn, New York

STILLWELL AND GLADDING, Inc.

Analytical and Consulting Chemists

Members Association of Consulting Chemists and Chemical Engineers

80 West Street

New York City

FRANK R. GUNN

COMPANY

Analytical and Consulting Chemists
Ontario and Brabant Sts. Philadelphia, Pa.

Skinner & Sherman, Inc.

246 Stuart Street, Boston, Mass.

Bacteriologists and Chemists

Disinfectants tested for germicidal value or phenol coefficient by any of the recognized methods.

Research—Analyses—Tests

Patents and Trade Marks

Patent your inventive ideas. Register your trade marks. Protect your most valuable assets. For full information address LESTER L. SARGENT, Registered Patent Attorney, 1115 K Street, N. W. Washington, D. C.

LLOYD A. HALL

Research and Consulting Chemist

Specialist in the analysis, development and improvement of soaps, disinfectants and allied products since 1915.

Complete Research and Consulting Service Laboratories, 1415 West 37th Street, CHICAGO, ILL.

REPELOCIDE

for 1933 sprays is really — CLICKING!

You cannot afford to wait or doubt

your NEW DEAL for

Livestock and Household Sprays must be outstanding. Make it so by using

REPELOCIDE

the Combined Repellent and Toxic Activator

Let us send you full detailed information. Trial gallon \$2.50 F.O.B. St. Louis.

THOROCIDE COMPANY

619 Clark Avenue

St. Louis, Mo.

F. & S.

Quality Colors

for

TOU ET SOADS

TOILET SOAPS LIQUID SOAPS

TOILET PREPARATIONS

Long experience enables us to produce colors for all types of soaps.

If you have a shade you want matched send us a sample. We have complete facilities for matching.

Liquid soap colors a specialty—send for samples of F. & S. greens and ambers.

FEZANDIE & SPERRLE, Inc.

205 FULTON STREET NEW YORK, N. Y.

Import-Manufacture-Export

RAW MATERIAL and EQUIPMENT GUIDE

(Continued from page 108)

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MACHINERY

Ertel Engineering Co. (Liquid Handling)
Anthony J. Fries (Soap Dies)
Houchin Machinery Co. (Soap Machinery)
Huber Machine Co. (Soap Machinery)
Illinois Steel Co. (Stainless Steel)
R. A. Jones & Co. (Automatic Soap Presses
and Cartoning Machinery)
Proctor & Schwartz (Dryers)
J. B. Sedberry Co. (Grinders)
Stokes & Smith Co. (Packaging Machinery)

MACHINERY, USED

Consolidated Products Co. Newman Tallow & Soap Machinery Co. Stein-Brill Co.

METAL CAPS

Anchor Cap & Closure Corp. Crown Cork & Seal Co. Ferdinand Gutmann & Co.

MISCELLANEOUS MATERIALS

Derris Inc. (Derris Products)
General Naval Stores Co. (Pine Oil-Rosin)
Hercules Powder Co. (Pine Oil and Rosin)
Industrial Chemical Sales Co.
(Decol, Carbon, Chalk)
Pylam Products Co. (Lathering Agent)
Rohm & Haas Co. (Insecticide Pase)
Sennewald Drug Co. (Poison Baits)
L. Sonneborn Sons (Petroleum Products)
Thoricide Co. (Insecticide Base)

OILS AND FATS

Industrial Chemical Sales Co.
Leghorn Trading Co.
Newman Tallow & Soap Machinery Co.
Theobald Annual By-Products Refinery
Welch, Holme & Clark Co.

PARADICHLORBENZENE

E. I. du Pont de Nemours & Co. Hooker Electrochemical Co. Monsanto Chemical Works Niagara Alkali Co. Solvay Sales Corp.

PERFUMING COMPOUNDS

Dodge & Olcott Co.
P. R. Dreyer, Inc.
Felton Chemical Corp.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Maybee & Reynard, Inc.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

PYRETHRUM PRODUCTS

(Insect Flowers, Powder and Pyr. Ext.)

W. Benkert & Co. J. L. Hopkins & Co. McCormick & Co. McLaughlin, Gormley, King Co. John Powell & Co.

SOAP COLORS

Eaton-Clark Co. Fezandie & Sperrle Interstate Color Co. Pylam Products Co.

SOAP DISPENSERS

Auto-Sun Products Co. Clifton Chemical Co. Eagle Soap Corp. Fuld Bros. Palmer Co. U. S. Sanitary Specialties Co.

SODIUM SILICATE

American Cyanamid & Chemicals Corp. General Chemical Co. Grasselli Chemical Co. Mechling Bros. Chemical Co. Philadelphia Quartz Co. Standard Silicate Co.

SPRAYERS

Breuer Electric Mfg. Co.
Du La Mfg. Co.
Electric Sprayit Co.
Hudson Mfg. Co.
Kaz Mfg. Co.
Lowell Sprayer Co.
Manning-Bowman & Co.
Metal Specialties Mfg. Co.
U. S. Sanitary Specialties Corp.
William Vogel & Bros.

STEEL CONTAINERS

John Trageser Steam Copper Works (Pails and Drums) Wilson & Bennett Mfg. Co. (Pails and Drums)

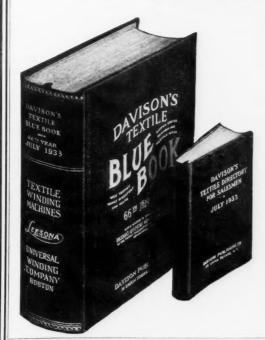
SULFONATED OILS

National Oil Products Co. Richards Chemical Works

TRI SODIUM PHOSPHATE

American Cyanamid & Chemicals Corp. Bowker Chemical Co.
General Chemical Co.
Grasselli Chemical Co.
Swann Chemical Co.
Victor Chemical Works
Warner Chemical Co.

. . A STRONG COMBINATION



for SECURING BUSINESS from the TEXTILE INDUSTRY

The large one in the office for circularizing, mailing, telephoning or reference. The small one for your salesmen or traveling executives.

\$7.50 and \$4.00 separately or together Prepaid anywhere to responsible firms

DAVISON PUBLISHING COMPANY

"Standard Textile Publications Since 1866"

50 UNION SQUARE

NEW YORK

MAILING LISTS

Pave the way to more sales with actual names and addresses of Live prospects. Get them from the original compilers of basic list information—up to date—accurate—guaranteed.

Tell us about your business. We'll help you find the prospects. No obligation for consultation service.



Gives counts and prices on 8,000 lines of business. Shows you how to get special lists by territories and line of business. Auto lists of all kinds. Shows you how to use the mails to sell your products and services. Write today.

R. L. POLK & CO.

Polk Bldg.—Detroit, Mich. Branches in Principal Cities World's Largest City Directory Publishers Mailing List Compilers. Business Statistics. Producers of Direct Mail Advertising.

STABLE AUTOMOBILE POLISH

HULL EMULSIFIER

renders the suspension of Cleaner completely stable in standard types of Cleaner-Polish.

Ask for Details

The Hull Company

305 Washington Street Brooklyn, N. Y.

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R. A. Jones & Co. 1 Kaz Manufacturing Co. May Issu	*Warner Chemical Co
Kemiko Mfg. Co. 10 *Koppers Products Co. 10	3 *White Tar Co

Olive Oil

Olive Oil Foots

Deliveries spot and future in barrels, tank cars, drums or tank wagons.

ESSENTIAL OILS

Lemon-Bergamot-Orange

+4513++

LEGHORN TRADING CO.

155 East 44th St., New York

Phone: VAnderbilt 3-6361-2-3 ITALY - SPAIN - GREECE - TURKEY - AFRICA



SUPER SERVER

The Palmer line includes a type and size dispenser for every requirement —in a complete price range.

The Super Server, illustrated above, The Super Server. illustrated above, is a low-priced push-in type dispenser that is an exceptional value. Metal parts are non-corrosive, stainless, chrome alloy. Beautiful natural chrome finish bracket. Valve parts are easily removed for cleaning or replacement. Crystal glass decagon bowl (opal glass on special order). Large 1-inch opening for easy filling. A neat. compact, durable dispenser. The lowest-priced push-in dispenser.





Palmer "D. C." Dispenser

(Dependable Construction)

The lowest priced dispenser of this type ever offered. Not necessary to remove or invert bowl for re-filling-pour in soap through 1-inch top opening. Has simple, positive spring-controlled valves. Regulary furnished with decagon bowl like Super Server, or with round bowl on special order.

We manufacture a complete line of faultor and sanitary supplies. Write for our dis-tributor proposition.

SPRAY PROCESS FOR SOAP POWDERS

New 68 pg. booklet on latest equipment and methods of manufacture by Bert Thomas.

Includes working formulas and equipment design.

> Printed in German Price \$1.00 postpaid

(Check or stamps must accompany order.)

MacNair-Dorland Co.

136 Liberty Street

New York



No Chemical Plant Is Complete

Without a Compact Technical Library

And No Such Library Is Complete Without These Well-Known

TECHNICAL BOOKS

Perfumes, Cosmetics and Soaps, by Poucher. New and revised edition of this standard reference. Volume I, a dictionary of raw materials, 394 pages, \$6.50. Volume II, dealing with the manufacture of soaps, perfumes and toilet preparations, 406 pages, \$9.00.

The American Soap Maker's Guide, by Meerbott and Stanislaus. The most recent American publication on soap manufacturing. 750

pages. \$7.50.

Textile Soaps and Oils, by Hurst & Simmons. A handbook on the preparation and properties of soaps and oils used in textile manufacturing. 212 pages. \$4.00.

Henley's Twentieth Century Book of Recipes, Formulas and Processes. A handy reference book listing 10,000 miscellaneous formulas, including special sections for soaps, polishes, insecticides, etc. 800 pages. \$4.00.

The Industrial Chemistry of Fats and Waxes, by Hilditch. A study of the fats and waxes in relation to their use in industry. 450 pages.

\$6.00

Manual of Toilet Soap Making, by Deite. Translation from a standard German text on manufacture of toilet and medicated soaps. 360 pages. \$8.00.

Art of Soapmaking, by Watt. Practical handbook on the manufacture of hard and soft soaps. 323 pages. \$4.00.

Modern Soap Perfumes, by Sedgwick. A practical handbook on the science of soap perfumery. \$1.00.

Hydrogenation of Organic Substances, by Ellis.

Latest revised edition of this well-known book, pre-eminent in the field of hydrogenation. 990 pages. \$15.00.

Modern Soap and Detergent Industry, by Martin. Second Edition. An outstanding contribution to the literature on soap manufacture. Thoroughly up to date work covering processes, apparatus and formulas. In two volumes—cloth binding, $6\frac{1}{2} \times 10\frac{1}{2}$. Price \$12.00 for each volume.

Chemical Encyclopaedia, by Kingzett. A digest of chemistry and chemical industry. 810 pages. \$10.00.

Soaps and Proteins, Their Colloid Chemistry in Theory and Practice, by Fischer. 272 pages. \$4.00.

The Examination of Hydrocarbon Oils, and of Saponifiable Fats and Waxes, by Holde. 572 pages. \$6.00.

Soaps, by Hurst. A practical manual of soap manufacture. 440 pages. \$8.50.

A Handbook of Soap Manufacture, by Simmons and Appleton. 167 pages. \$4.00.

Soap Blue Book, A Buyer's Guide. 195 pages. \$1.00.

Vegetable Fats and Oils, by George S. Jamieson. 444 pages. An American Chemical Society Monograph. Covering classification, occurrence, properties, analytical methods, etc., of vegetable oils, fatty acid and other derivatives; also production and refining methods. \$6.50.

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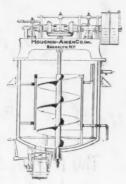
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